

# Impact of Malnutrition on Women and Child Health, Its effects on Socioeconomic Growth of a Nation

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## **Abstract**

Women and Child Malnutrition these words are common for us because usually read in the newspapers and frequently news are highlighted worldwide. Focuses on the Malnutrition eradication program are more. Many initiatives are taken by Government agency and NGOs worldwide, but

within the eradication time we have following factors.

**Keywords:** *Women and Child Malnutrition, Socioeconomic Growth*

- Effects on Women and ChildHealth: - From physical malnutrition, as indicated by wasting (low weight-for-height), underweight (low weight-for-age) or stunting (low height-for-age), to micronutrient deficiencies leading to lowered immune competence, anaemia, developmental and cognitive defects, etc.
- Physical malnutrition: - factor influencing by physical malnutrition are indicated by wasting (low weight-for-height), underweight (low weight-for-age) or stunting (low height-for-age)
- Micronutrient deficiencies: - factor influencing by Micronutrient deficiencies are indicated by leading to lowered immune competence, anaemia, developmental and cognitive defects, etc.
- Suffering from various health Diseases due to Nutrition Deficiency: people's concerns for their children i.e the pain and distress of hunger, the uneasy or painful sensation caused by shortage of food.
- Behaviour and Psychological impact due to poor Nutrition: Among the food-seeking dominates decisions, destitute, and behaviour in a way that favours short-term survival to the exclusion of much else;
- Socioeconomic Problems: Reduced productivity, both from lowered energy availability for work and from lowered physical fitness resulting from malnutrition, as well as changes in risk-taking and coping strategies.

- Hurdles in the National Growth and Development: -Productivity of the malnourished individual affects the Nation growth due to weakness in the health of Individual.

## **1. Introduction**

For the last decade, it has been observed that transformational and charismatic leadership measured very critical aspects of leadership, which is highly associated with individual and organizational performance as well. Effectiveness of leadership measures the ability of leaders to provoke the followers.

In 1974, the World Food Conference was held in Rome, which was famously stated by Henry Kissinger that within a decade, no child should go to bed hungry (UN, 1975). At this time, FAO's 4th World Food Survey (FAO, 1977) was under way, and already many efforts had gone into quantifying the extent and distribution of hunger. By the time estimates used and then continued to the present instead of forming the basics of these discussions - the total numbers of hungry in world history can now be seen to have peaked in the 1960s (FAO, 2000, p. v; see discussion in Mason, 1996, as per on FAO estimates). But, if progress is likely from a number of indicators and angles, it is internationally accepted that the rate is very slow.

A number of summits and international conferences encouraged and reaffirmed the intent to reduce the hunger and malnutrition in worldwide. The World Summit for Children (UN, 1990) committed states to

dividing the extent of child malnutrition by the year 2000, with associated goals for particular nutritional problems. The International Conference on Nutrition in 1992 (FAO/WHO, 1992) restated and added depth to such goals. At the World Food Summit (WFS) of 1996 (FAO, 1996a), leaders of 186 countries pledged to minimise by half the numbers of hungry people in the world by 2015 (FAO, 2000, p. IV). The UN's recent Millennium Development Goals included commitments to a similar intent (UN, 2000)1.

Strangely, all this is possible without exact definitions and dependable numbers; like the emotive strength of the concern for hunger. But undoubtedly, a main feature of sustaining this concern and converting it into effective action is to clarify the concepts, refine the description of the problem, evaluate the extent of progress in different parts of the world and for various people groups, evaluate the impact of current actions and propose suitable new policies. Malnutrition and Hunger are difficult to explain in precisely measurable terms and moreover are difficult to evaluate, particularly for large groups of people. The preparation and holding of the International Conference on Measurement and Assessment of Food Lack and under nutrition in June 2002 has the potential for a far-reaching contribution towards ensuring that many people have sufficient to eat, through improved understanding of the problem and its solution. The conventional exigency for good quantification supporting right-minded decisions are sometimes observed as a luxury when faced with suffering that demands urgent attention; but time and again, it has been observed that a cost-effective and systematic approach requires sound information and

analysis. This paper tries to conduct together the consensus on methods for assessing these numbers and their trends, also to indicate the ways ahead where disagreements in opinion (far lesser than the points of agreement) which has to be resolved.

### **Rights of Both Women and Children on Balance Nutrition**

In many causes of disease, disability and death among children, none cuts a wider swath with more long-range consequences — yet is more easily preventable — than maternal ill health during pregnancy. This is not only unforgivable, but also unnecessary and can be avoided through interventions that cost nearly 3 present capita every year. The Short term and long term effect of Malnutrition.

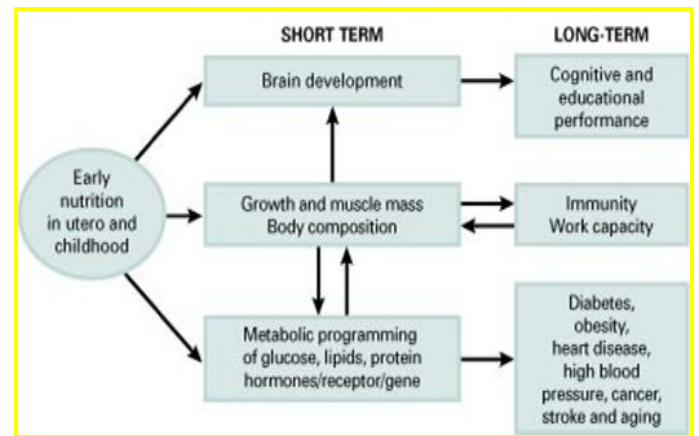


Figure: - 1.

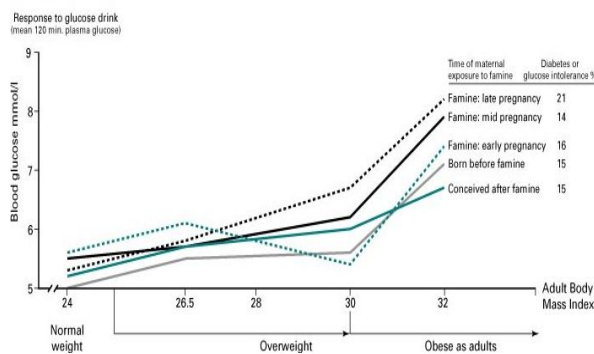
(Source: *Ending Malnutrition by 2020: An Agenda for change in the millennium*, final report to the ACC/SCN by the Commission on the Nutrition Challenges of the 21<sup>st</sup> Century, February 2000, Figure 3, p. 19; Figure 4, p. 20. Adapted from A.C.J. Ravellietal.,

"Glucose tolerance in adults after prenatal exposure to famine",  
The Lancet, 351 (9097) copyrighted by The Lancet, January 1998.)

Figure: - 2.

Ensuring that pregnancies are healthy clearly can have a deep impact on women, children and society at large. Expectant mothers need sufficient nutrition and good, accessible prenatal, delivery, obstetric and postnatal care, in addition to that an environment free of pollutants, exhausting labour and extreme stress like conflict. Investments in maternal nutrition on protein, vitamin A and iron supplementation or strengthening yield high returns. Reducing malnutrition in expectant mothers would reduce disabilities in their infants by nearly one third. For at-risk infants, early childhood care programmes can help prevent disabilities.

Young women and girls must have educational choices to better provide for their children. Women of all age groups require to be screened for HIV/AIDS and sexually transmitted infections. Fathers must be involved in parent education. Communities need clean water and sanitation, and societies require the values and the legislation that build respect and a non-discriminatory climate for women.



(Source: Ending Malnutrition by 2020: An Agenda for change in the millennium, final report to the ACC/SCN by the Commission on the Nutrition Challenges of the 21st Century, February 2000, Figure 3, p. 19; Figure 4, p. 20. Adapted from A.C.J. Ravelli et al., "Glucose tolerance in adults after prenatal exposure to famine", The Lancet, 351 (9097) copyrighted by The Lancet, January 1998.)

This minor step might be tolerance on terminology. For now, the term "hunger" can be used in its everyday meaning, perhaps as shorthand, but it is close enough to *food deprivation* and *undernourishment* that using more than one term is always redundant. The term *malnutrition* – often used to mean the physical effects of restricted diet on the body - is used here to mean the biological and functional consequences of hunger. An extensive discussion of terminology is in the paper by Shetty in this series. In the present paper, malnutrition is used for the physical effects of insufficient nutrition (e.g. growth problem, particular nutrient deficiencies such as iron deficiency anaemia), which Shetty refers to as malnutrition and under nutrition, for specific deficiencies and general non-specific results. While this fosters communication, the underlying concepts and definitions do need to be tight, and the way in which they are to be measured should be agreed upon - more so if measuring trends is a major aim.

The concerns about hunger are primarily for the results of inadequate nutrition, not really the actual nutrient intakes themselves. Insufficient intakes are taken to forecast undesirable outcomes in biological and health development, behaviour and productivity. Therefore, practically to consider

measuring these results as part of monitoring progress in minimizing hunger. A scheme demonstrating the relation of diet to biological and functional results is shown in Figure 9. This scheme considers that we may require to move beyond growth and clinical plus biochemical status, and include in our concerns motor and cognitive development, behaviour, physical fitness & productivity, school performance and educability. In particular, work in these years has re-highlighted the long-term effects of early nutrition on cognitive development and school performance (as per Brown and Pollitt, 1996), with implications for following economic and functioning activity.

Most of the nutritional deficiencies interfere with the complex metabolic processes that run human lives. In part, this is straightforward; for example, a significant number of key enzymes are metallo-enzymes, requiring metals from the environment to function.

### Nutritional Biological and functional outcomes and functional outcomes

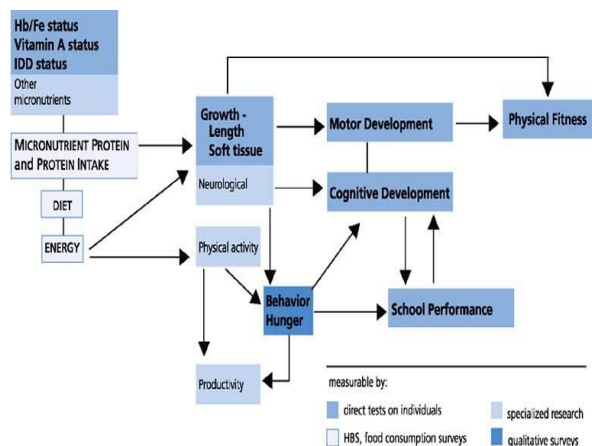


Figure:-3. A scheme illustrating the relation of diet to biological and functional outcomes

Other essential nutrients are required for hormones (e.g. iodine). But ultimately, the complexity of

biological systems means that they could be readily disturbed. A marvel of evolution, the immune system is probably compromised by most nutrient deficiencies, and it looks like that cognitive function may be vulnerable. The major role of iron in cognitive functions has been identified recently, difference from its function in haemoglobin. It makes a minor sense to monitor and intervene for individual nutrients except perhaps when there is a specific opportunity, such as infrequent massive vitamin A dose, an intervention applicable to nearly no other nutrient. Human being need sufficient food of adequate quality, so monitoring the level of total intake as energy plus selected major nutrients should be the choice to go.

### Micronutrient deficiencies

Food intake is a major thing for lives and even more than dietary energy. Insufficient diets have serious consequences beyond hunger, less growth and thinness. The sensation of hunger probably comes out from inadequate food energy, this is why the concern for hunger has mostly meant total food. Micronutrient deficiencies have been referred to as *hidden hunger* (WHO/UNICEF/World Bank/Canadian International Development Agency/US Agency for International Development/FAO/UNDP, 1991), However, the term never really caught on. Lack of nutrients, aside from lack of energy, has profound effects economically plus impacts on health as well as behaviour. In addition to that, in theory, the extent of insufficient diet quality is nearly to be greater than for quantity, as the low cost foods have the poorest quality and just because of hunger poor people will think first to fill their stomachs to fulfil their energy requirements

(Allen, 1994). In practice, micronutrient deficiencies are found to be largely widespread, probably more so than malnutrition as assessed by the inadequacy of energy intake or by anthropometry (Mason et al., 2001a, p. 38), although the comparisons depend on the rather arbitrary cut-offs.

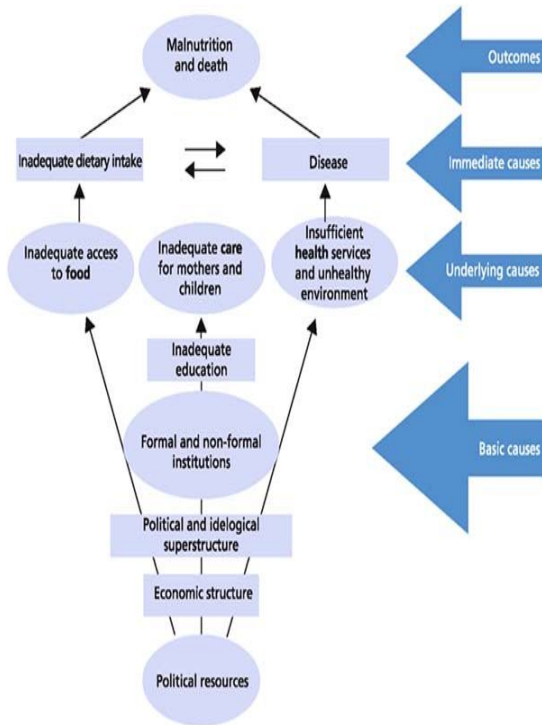


Figure: - 4. Redrawn from UNICEF (1990)

### Household income and expenditure surveys

Direct measures of energy intake have long been possible from HIES, as described in the paper by Smith in the series. It states that either food quantities or prices must be noted on the questionnaires of household economic activity for conversion of spending to kilocalories. Although, this is not a routine process within HIESs, still it has been advocated literally for years. A new attempt to gain this could be extremely affordable. Similar to the

other energy estimates, the outcomes are not readily interpreted in terms of adequacy, as the needs are not aware. If household intakes are related to household needs, then care should be taken. Thus, energy intake estimates should be noted as such and not in relation to requirements unless these have been specifically assessed. This constraint has to be explicitly identified.

The good point of energy consumption estimates from HIESs are they directly give household-level energy intakes plus their distribution. Without any doubt, the intake estimates are therefore more precise than DES-derived indicators, as the latter stem from national average estimates, not household surveys. Although, the intake estimate reference period from HIESs is much less than one year, and as noted above, their coverage is sparse.

One encouraging method ahead might be for HIES-derived estimates of energy intake to be emphasized in specific countries. While relating the outcomes to the need would remain difficult, evaluating the style in average intake would be indispensable in regard to providing a direct assessment of change. These HIES-derived data with adequate analysis, particularly of causal factors, could contribute also to policy studies of better ways to gain progress in minimizing food insecurity. This kind of analysis may be necessary of cross-sectional for initially in the absence of time series data, but even cross-sectional investigations can be useful if they are specifically oriented to the local situation, instead aimed at establishing general relationships.

### Individual food surveys

Food intake surveys usually refer to the direct assessment of quantities of food consumed by individual household members, as demonstrated by Ferro-Luzzi (see Figure 1 of the Ferro-Luzzi). This contrasts with the household expenditure method that estimates average food quantities at the household level from data on food expenditures and prices, although some of these surveys do also ask about weights of foods. Food intake surveys also pay more attention to food composition and therefore are able to provide information on intakes of nutrients as well as dietary energy. Such approaches aim to give more precise measurements of intake and sometimes attempt to measure needs, involving energy expenditure, although these are quite difficult and costly to estimate. Therefore, although the intake figures may be more accurate, their interpretation in terms of adequacy, i.e. identifying hunger, remains problematic.

This method is not a substitute to HIES because of its limited application owing largely to resource demands, but instead it may give a better understanding of data that are more largely available. The elements of dietary patterns and habits can be studied from food intake surveys. Energy and nutrient intakes can be related to results of interest, such as health, behaviour and activity, and interactions with disease can be investigated. This is major for better understanding observed changes, for analyzing policies also for suggesting changes to drive improvement. Actually, this ability of food intake surveys could be considered their primary role instead expecting that they give a key source of monitoring data at national levels.

One particular method developed in food intake surveys, the food frequency questions, which is, however preferred by Ferro-Luzzi for bigger application in this context. This method aims to estimate food intakes by interview with the use of standardized descriptions of portion sizes also amounts served and cooked. Considerable investment would be needed to make alterations in this method like to local cultures and dietary habits, to develop relevant food composition tables and to validate and interpret results for comparisons across the nations. The research pedigree of food intake methodology has considered for the individual requirements, involving activity levels in a way that other methods have to be reduced. Thus, this crucial issue in elucidating intake estimates inadequacy terms like essential for defining hunger from intake data which is implicit in this method. In practical, broad application of the food frequency method would require a significant commitment of effort and follow-through for a long period of time. The needs are quite similar to those for qualitative measures of food security discussed below, and there might be a benefit in pursuing the development of these two methods together.

### **Qualitative measures of food insecurity and hunger**

Kennedy described these methods in a paper in the same series are still new and have widely been developed for the application in North America initially relating to safety net programmes such as food stamps. They are slightly differing in concept from the others and they concern such questions like: whether meals have been skipped owing to

inadequate funds or supplies; worries about not being able to feed the children; and hunger and weight loss themselves (sample questions from the Kennedy paper). This method would observe, mostly relevant - indeed overdue - particularly if it is recognized that the issue of hunger goes beyond only if the energy intake itself as discussed in the first section of her paper. Assessing perceptions of hunger and related behaviour is much more than an indirect measure; it attempts to get to the heart of the problem of hunger. In addition to this, there is evidence supporting the disagreement that subjective reporting on the sensation of hunger could be reliable in concern to other evaluates of food insecurity, as discussed by Kennedy. Whilst validation is required in different cultural settings, which shows no more difficult than for other social and behavioural research.

Several other tries to evaluate experiences qualitatively and retrospectively, like the question used in Indian surveys relating whether the respondent had “a square meal each day”, apparently produced estimates very low to be believed - but it is our uncertainty about the real extent of hunger that may be this deserves a second look. The concern for cross-country comparability, brought up by Kennedy, is mitigated if one objective relates the trends rather than absolute levels. Seeing that the indicators of qualitative hunger perception and response were differing in the same direction as other estimates for defined population groups and also nationally could give enough information for a credible and sufficient hunger monitoring system. Further, all the indicators have problems of cross-country comparability in some way, this is why studying within a country or

within a region trends should be promoted. The DES mean estimates are biased by the production system (like roots and tubers), and the distribution around the means no confusion depends on cultural factors not captured in the CVs used. Dietary energy evaluated from HIES and food intake surveys are certainly more comparable in population groups than across, particularly where dietary habits differ culturally; such as being the consumption of foods outside the home. As stated earlier, a cross-country comparison of underweight prevalence is not simple either. This was most noticeable in the case of the South Asian effect, but even more general because the relative extent to which various populations fail to develop in the face of deprivation is not known about. Comparing the prevalence by income band, as shown in Figure 7, shows a greater effect of location than income in many cases.

In any event, the recommendation is that qualitative methods be developed in the country as well as culture-specific ways in order that a short questionnaire can be involved in broader surveys, like the HIESs. This result to better descriptions of within-country differentials and presumably of trends in the near future. Some work of this type has already started in Bangladesh (E.g. Webb, Coates, and Hous-er, 2001) and in other countries. A main factor for wider application will be the feasibility of incorporating the questionnaire in other surveys (HIES, and/or those with health or anthropometric measures, like DHS and UNICEF-MICS). The shorter six-question format equivalence from the US module would be recommended to the longer eighteen-question core module, but clearly, the



trade-offs will need to be assessed by in-country research.

## **Conclusion**

In every nation's manpower is the main assets of nation and every man's balanced nutrition is very much important. If nutrition is not balanced, then its effect on health of individual and numbers of individuals affected, then it reflects on the society.

This paper reflects the effect of unbalanced nutrition on the health of women and child health it also affects society's development as well as Nations Development.

Overall, the approach might be to:

- a) Develop the questionnaire which are country-specific with the required investment in a selected number of countries;
- b) Test the incorporation of the questionnaire in broader purpose surveys and compare results;
- c) Use this as one method to triangulate on trends, perhaps in sentinel countries to begin with.

Accordingly, it is truly accepted that all five methods above consisting anthropometry, also complement each other in the food deprivation analysis. But in reality, the nature of complementarily much better than what is captured by the statement that they measure various aspects of food deprivation.

## **References**

- 1) The WFS target is halving the number of hungry, more difficult than the MDG of halving the proportion, but nonetheless relevant here (de Haen, personal communication, 2001).
- 2) An extensive discussion of terminology is in the paper by Shetty in this series. In the present paper, malnutrition is used for physical effects of inadequate nutrition (e.g. growth failure, specific nutrient deficiencies like iron deficiency anaemia)
  - 1) "FAO methodology for estimating the prevalence of undernourishment", by L. Naiken 1998;
  - 2) "The use of household expenditure surveys for the assessment of food insecurity", by L. Smith;
  - 3) "Individual food intake survey methods", by A. 2003 Ferro-Luzzi;
  - 4) "Measures of nutritional status from anthropometric survey data", by P. Shetty 2002;
  - 5) "Qualitative measures of food insecurity and hunger", by E. Kennedy.
  - 6) Food and Nutrition Research Institute & UNICEF. 2001. Philippines nutrition facts and figures. Manila.
  - 7) Keynote paper: Measuring hunger and malnutrition by John B. Mason, Tulane University, New Orleans, LA, USA
  - 8)

- 9) <https://www.food.gov.uk/sites/default/files/multimedia/pdfs/scotdietassessmethods.pdf>
- 10) UNICEF. 1990. Strategy for improved nutrition of children and women in developing countries. Policy Review Paper E/ICEF/1990/1.6, UNICEF, New York; JC 27/UNICEF-WHO/89.4. New York.
- 11) Heaver, R. & Mason, J.B. 2000. Making a national impact on malnutrition in the Philippines: you can't get there from here. A case study of government policies and programs, and the role of UNICEF and the World Bank. Report to World Bank/UNICEF.
- 12) WHO/UNICEF/World Bank/Canadian International Development Agency/US Agency for International Development/FAO/UNDP. 1991. Ending hidden hunger. Proceedings of a Policy Conference on Micronutrient Malnutrition, 10-12 October 1991, Montreal, Canada. Geneva.
- 13) Allen, L.H. 1994. Nutritional influences on linear growth: a general review. *Eur. J. Clin. Nutr.*, 48 (Suppl. 1): S75-S89.