

THE PREVALENCE OF MALNUTRITION IN DEVELOPING COUNTRIES: A REVIEW

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ABSTRACT

Disease and malnutrition are closely linked. Sometimes disease is the result of malnutrition, sometimes it is a contributing cause. In fact, malnutrition is the largest single contributor to disease in the world, according to the UN's Standing Committee on Nutrition (SCN). The model characterizes the correlates of malnutrition as factors that impair access to food, maternal and child care, and health care. It is these very factors that impact the growth of children.

Keyword: Malnutrition, Disease, Developing countries, Health.

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INTRODUCTION

Each year about 13 million infants and children die in the developing countries [1]. The majority of these deaths are due to infections and parasitic diseases, and many if not most of the children die malnourished. According to Benson (2005), malnutrition is a physical condition or process that results from the interaction of inadequate diet and infection and is most commonly reflected in poor infant growth, reduced cognitive development, anemia, and blindness in those suffering severe micronutrient deficiency, and excess morbidity and mortality in adults and children alike. The effects of malnutrition on human performance, health and survival have been the subject of extensive research for several decades and studies show that malnutrition affects physical growth, morbidity, mortality, cognitive development, reproduction, and physical work capacity [1, 2]. Malnutrition is particularly prevalent in developing countries, where it affects one out of every three preschool-age children [3, 4]. Factors that contribute to malnutrition are many and varied. The primary determinants of malnutrition, as conceptualized by several authors relate to unsatisfactory food intake, severe and repeated infections, or a combination of the two [5-7]. The interactions of these conditions with the nutritional status and overall health of the child - and by extension - of the populations in which the child is raised have been shown in the UNICEF Conceptual framework of child survival [5].

Briefly, the model characterizes the correlates of malnutrition as factors that impair access to food, maternal and child care, and health care. It is these very factors that impact the growth of children.

Malnutrition in women and children

The nutritional status of women and children is particularly important, because it is through women and their off-spring that the pernicious effects of malnutrition are propagated to future generations. A malnourished mother is likely to give birth to a low birth- weight (LBW) baby susceptible to disease and premature death, which only further undermines the economic development of the family and society, and continues the cycle of poverty and malnutrition. Although child malnutrition declined globally during the 1990s, with the prevalence of underweight children falling from 27% to 22% [8], national levels of malnutrition still vary considerably (0% in Australia; 49% in Afghanistan) [9]. In contrast, south-central Asia still has high levels of child malnutrition, even though the rate of underweight children declined from 50% to 41% during the 1990s. In Africa, the number of underweight children actually increased between 1990 and 2000 (from 26 million to 32 million), and 25% of all children under five years old are underweight, which signals that little changed from a decade earlier. The projection for 2005 is that the prevalence of child malnutrition will

continue to decline in all regions but Africa, which is dominated by the trend in

sub-Saharan Africa [8, 10].

Figure 1.1 Causal framework for child malnutrition

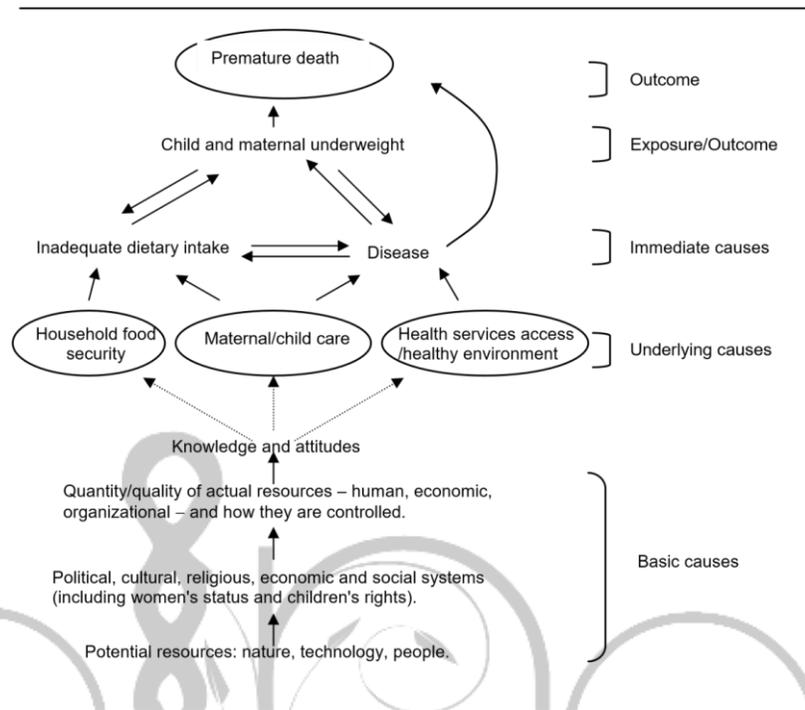
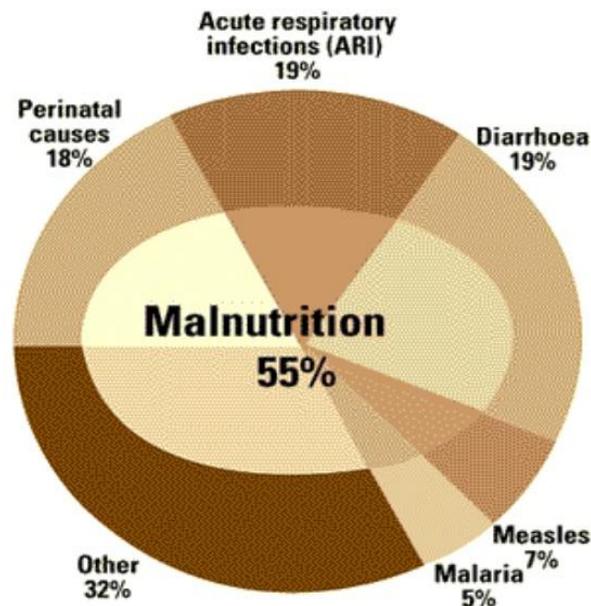


Figure 1.2 Proportional mortality in children younger than five years old



Many factors can contribute to high rates of child malnutrition, ranging from those as fundamental as political instability and slow economic growth, to highly specific ones such as the frequency of infectious diseases and the lack of education. These factors can vary across countries [11]. Important determinants of child malnutrition, such as the prevalence of intrauterine growth retardation (IUGR), also differ considerably across geographical regions [12].

Malnutrition and child growth

Malnutrition commonly affects all groups in a community, but infants and young children are the most vulnerable because of their high nutritional requirements for growth and development. Another group of concern is pregnant women, given that a malnourished mother is at high risk of giving birth to a LBW baby. Malnourished girls, in particular, risk becoming yet another malnourished mother, thus contributing to the intergenerational cycle of malnutrition.

In developing countries, poor perinatal conditions are responsible for approximately 23% of all deaths among children younger than five years old (Fig. 1.2). These deaths are concentrated in the neonatal period (i.e. the first 28 days after birth), and most are attributable to LBW [29]. LBW can be a consequence of IUGR, preterm birth, or both, but in developing countries most LBW births are due to IUGR (defined as below the tenth percentile of the Williams sex-specific weight-for-

gestational age reference data). [13-14]

Growth assessment is the single measurement that best defines the health and nutritional status of a child, WHO has been recommending that a single international reference population be used worldwide, with common indicators and cut-offs, and that standard methods be used to analyse child growth data. [15]

The underlying causes of malnutrition in India

A number of issues sit behind Bangladesh's high levels of malnutrition. Poverty and inequality are basic drivers of malnutrition in India. [16] Nutrition is closely linked to poverty in India, which is widespread and affects the bottom and middle wealth quintiles. The ability to afford a nutritious diet is limited to the wealthier sections of Bangladesh's society. [17]

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