

Abstract:

Considerable evidence shows an association between malnutrition and child mortality. Some research supports the widely held belief that malnutrition has a synergistic effect on mortality. Specifically, it kills children in synergy with diseases, especially pneumonia and diarrhea. Most research methods only provide statistical inferences about association. Based on inferences resulting from past association studies, public health workers have implemented ineffective interventions to improve nutritional status. Randomized control trials are needed to test death causality in malnutrition cases. A multistudy analysis indicates a remarkable consistence of malnutrition's effect on infant and child mortality. For every 1% drop in weight for age, mortality rises at a compounded rate of 7.6%. Children with severe malnutrition are at 11 times the risk of dying (relative risk [RR] from the common disease than better nourished children. The RR is 3 for children at 65% weight for age and 2 for children at 75% weight for age. Thus this multistudy analysis clearly shows the synergism between malnutrition and disease. Another study in Senegal also indicates the synergistic effect of malnutrition on disease-specific mortality (diarrheas and pneumonia, but not at all on malaria). Further, an analysis of the literature demonstrates that the incidence of disease only increases in children with most severe malnutrition. The synergy of malnutrition with infection kills more children with milder degrees of malnutrition because the prevalence is much greater than for those with severe malnutrition, so interventions just for severe malnutrition cases do not greatly reduce malnutrition-related mortality. The most cost-effective means to improve nutrition (e.g., increasing purchasing power for foods or improving breast feeding practices) depend on the circumstances of the population.