

## Malnutrition in children with cancer in Pakistan

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**Background:** Malnutrition is common among the majority of cancer patients, including children with cancer. In underdeveloped countries such as Pakistan, various degrees of undernutrition are prevalent in the normal population. Malnutrition is recognised to have profound effects on tolerance of anti-cancer therapy, survivability and treatment outcomes. In previous studies, malnutrition was shown to be a negative prognostic factor at Shaukat Khanum Cancer hospital.

**Method:** Two hundred and fifty children admitted to the hospital were assessed for nutritional status. Both anthropometric and biochemical parameters were used as the basis for assessment. Patients were further classified into Grade-1 (mildly malnourished), Grade-II (moderately malnourished) and Grade-III (severely malnourished) on the basis of weight for age using the physical growth scales of the National Centre for Health Statistics (1).

**Results:** Of the 250 children, only 17% were well-nourished and 83% were malnourished to some degree. Of those who were malnourished, 19% were mildly malnourished, 29% were moderately malnourished and 35% were severely malnourished. Using biochemical parameters, 71% patients were hypoalbuminemic.

**Conclusion:** Malnutrition is prevalent in children with cancer in Pakistan. Pre-existing malnutrition in the community may be partly responsible. Serum albumin appears to be potentially useful in assessing malnutrition in these patients. Malnutrition will adversely affect treatment outcome, quality of life and increase mortality and morbidity. Aggressive nutrition therapy to correct nutritional status should therefore be initiated as early as possible.

1. National Centre for Health Statistics. Growth of healthy children. *Am J Clin Nutr* 1979; 32: 607–629.