Identifying Malnutrition

Nutritional status in newly diagnosed patients with cancer

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BACKGROUND: Malnutrition is common among patients with cancer, but little attention is given to its risks and consequences.

OBJECTIVES: The aim of this study is to assess the nutritional status and identify the factors associated with malnutrition among newly diagnosed patients with cancer.

METHODS: Patients admitted with newly diagnosed cancer at a teaching hospital in Malaysia were recruited from January to April 2015. Nutritional status was assessed before treatment initiation, and patients were classified into three categories: well nourished, mild to moderately malnourished, and severely malnourished. Clinical parameters and disease characteristics were also assessed.
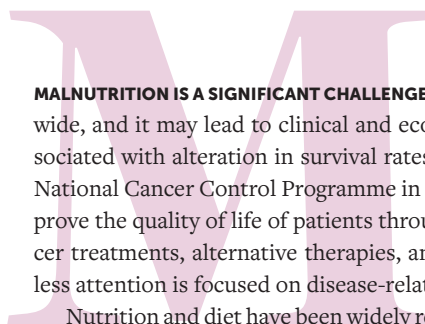
FINDINGS: A total of 132 pretreatment patients were recruited into the study. About half were severely malnourished. Patients with stage III cancer had the highest prevalence of severe malnourishment. Clinical parameters and disease characteristics were significantly associated with nutritional status. Demographic variables were also statistically significantly associated with severe nutritional status.

MALNUTRITION IS A SIGNIFICANT CHALLENGE AMONG PATIENTS WITH CANCER worldwide, and it may lead to clinical and economic consequences, which are associated with alteration in survival rates (Nitenberg & Raynard, 2000). The National Cancer Control Programme in Malaysia has been established to improve the quality of life of patients through early diagnosis, appropriate cancer treatments, alternative therapies, and rehabilitation facilities. However, less attention is focused on disease-related malnutrition.

Nutrition and diet have been widely recognized to play vital roles throughout the course of cancer care. In a study by Davies (2005), 85% of patients with cancer developed some form of dietary deficiency, with about half losing 5% of their weight at presentation and more in subsequent treatments.

Many studies have found that the presence of malnutrition not only increases length of stay, but also may lead to deterioration in clinical outcomes, increased cost and use of hospital resources, and increased number of complications (Sorenson et al., 2008). The risks of malnutrition and its severity depend on the type of cancer, stage of the disease, and the patient's pre-illness weight. The consequences of malnutrition among patients with cancer can lead to weight loss, muscle weakness, apathy, immune deficiencies, frequent infections, and higher mortality. Because of its deleterious effects on morbidity and mortality, early identification of patients at nutritional risk would help to improve the expected outcome.

Ravasco, Monteiro-Grillo, Vidal, and Camilo (2005) emphasized the importance of nutrition screening to help identify existing malnutrition; however, it is not routinely performed with the initial assessment. Patients are most commonly referred to dietitians or nutritionists for severe malnourishment. Timely intervention could prevent the patient from going into a cachexic state.

Malnutrition in patients with cancer is strongly associated with poor prognosis. Paccagnella, Morassutti, and Rosti (2011) found that weight loss of 50% was commonly found in patients with aggressive forms of lymphoma, as well as colon, prostate, and lung cancers. Higher incidence (85%) of weight loss was found in patients with upper gastrointestinal cancers. Weight loss has been found to be an important predictor of mortality and affects nutritional status. Malnutrition in hospitalized patients is the result of many factors associated with the disease and treatment (Aquino Rde & Philippi, 2011). One of the major causes of malnutrition is inadequate dietary intake.