

## **The effect of dietary intake changes on nutritional status in acute leukaemia patients after first induction chemotherapy**

### **ABSTRACT**

This study aimed to evaluate how changes in dietary intake among acute lymphoblastic and acute myeloid leukaemia (ALL and AML) patients affect nutritional status after the first induction chemotherapy. Dietary intake was assessed using 24-h recall and a 136-item food frequency questionnaire. Nutritional status was assessed by Patients Subjective Global Assessment questionnaire before starting induction therapy and again after 1 month. All newly diagnosed acute leukaemia patients aged 15 years old and older who attended three referral hospitals for initiation of their induction chemotherapy were included in the sample selection provided that they gave informed consent. A total of 30 AML and 33 ALL patients participated in the study. Dietary intake and nutritional status worsened after the chemotherapy treatment. Dietary intake in terms of macronutrients, micronutrients, food variety and diet diversity score changed significantly after the induction chemotherapy. No significant relationship was found between the changes in dietary indices and nutritional status. Chemotherapy-related side effects as an additional factor to cancer itself could affect dietary intake of leukaemia patients. The effectiveness of an early assessment of nutritional status and dietary intake should be further investigated in order to deter further deterioration.

**Keyword:** Chemotherapy; Dietary intake changes; Leukaemia; Nutritional status