

A Prospective Evaluation of Nutritional Care Given to Patients Admitted to Intensive Care Units

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Nutrition is an important adjunct therapy in overall management of critically ill patients and often it is an overlooked area in busy Intensive Care Unit (ICU) settings. Therefore, identification of individual nutritional requirements and timely supplementation is of utmost importance. The objectives of this study was to compare the individual calorie and protein requirements with the actual amounts of calories and proteins received by the ICU patients and to identify the discrepancies and deficiencies, if any, in the nutritional care with the aim of formulating guidelines on nutritional management of ICU patients in Sri Lanka.

This was a prospective cross sectional study conducted in five ICUs in the central province over a period of three months. Consecutive sampling method was applied. Patients between 20-70 years of age were included and those who were not given enteral feeds and patients who were haemodynamically unstable were excluded. Protein and calorie requirements were calculated using the Harris Benedict equation, adjusted according to stress factor and sex, and compared with the food received. Independent sample t test was performed to find out any significant difference between the recommended requirement and the received amounts.

Out of 85 patients, 64% were males and 36% were females. The average daily calorie amount received by male patients was 889.81 kcal \pm 439.93 and for females 711.64 kcal \pm 410.25. The average daily protein amount received by males and females were 45.36 g (\pm 25.93) and 33.15 g (\pm 22.31) respectively. Out of the study sample, 77.2% did not receive the recommended calorie requirement while 92.4% did not receive the recommended protein requirement. Further, the average calorie and protein amount received by patients was significantly lower than the respective recommended values.

In conclusion, the daily average calorie and protein intake was found to be significantly low among adult patients when compared to recommended requirements. Further improvement in calorie and protein provision is required depending on the clinical condition of individual patients. Therefore, more studies directed at individual clinical conditions and diseases and their nutritional intake is necessary.