Abstract

Introduction: Parenteral nutrition (PN) is indicated for patients who are unable to progress to oral or enteral nutrition. There are no local studies done on estimating the cost of PN in acute settings. The aims of this study are to describe the demographics, costs of PN and manpower required; and to determine the avoidable PN costs for patients and hospital on short-term PN. Materials and Methods: Patient data between October 2011 and December 2013 were reviewed. Data collected include demographics, length of stay (LOS), and the indication/duration of PN. PN administration cost was based on the cost of the PN bags, blood tests and miscellaneous items, adjusted to subsidy levels. Manpower costs were based on the average hourly rate. Results: Costs for PN and manpower were approximately S$1.2 million for 2791 PN days. Thirty-six cases (18.8%) of 140 PN days were short-term and considered to be avoidable where patients progressed to oral/enteral diet within 5 days. These short-term cases totalled S$59,154.42, where S$42,183.15 was payable by the patients. The daily costs for PN is also significantly higher for patients on short-term PN ($P<0.001$). Conclusion: In our acute hospital, 90% of patients referred for PN were surgical patients. Majority of the cost comes from the direct daily cost of the bag and blood tests, while extensive manpower cost was borne by the hospital; 18.8% of our cohort had short-term avoidable PN. Daily PN may cost up to 60% more in patients receiving short-term PN. Clinicians should assess patient’s suitability for oral/enteral feeding to limit the use of short-term PN.

Key words: Hospitalised, Avoidable, Nutrition support team

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