

Early Unplanned Readmission of Elderly in Singapore: A Retrospective Study

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Abstract

Study Objective: To study the incidence and profile of elderly patients requiring early unplanned readmission within 15 days of discharge from a regional hospital and the predictive factors for readmission. **Patients:** All patients (n = 150) aged 65 years old and above who were readmitted within 15 days into the hospital's geriatric unit in the western region of Singapore over a period of 10 months were retrospectively studied. **Methodology:** Demographic data, information on patients' medical problems and social environment were gathered from the patients' medical, nursing and therapist records. A control group (n = 103) consisting of patients not readmitted over 15 days were gathered over the same period. **Results:** The percentage of readmission over the period between 1 January 1999 and 31 October 1999 was (150/1632) 9.2% (95% CI, 7.8% to 10.7%). There were a total of 150 patients with an equal number of male and female patients. The patients had a mean of 4 medical problems. Cardiovascular disease was noted in 73% (95% CI, 65.5% to 80.2%) of the patients during the index admissions. They were noted to be ambulatory and were staying with their own families. Half of the patients were discharged from the index admission with no adjustment to their previous care system. The majority of patients (68.7%; 95% CI, 59.9% to 75.4%) required readmission because of medical problems. Fifty per cent of the patients admitted for a new medical complaint were secondary to sepsis. Thirty per cent (95% CI, 22.8% to 38.0%) of the study population had both medical and social issues. The main predictive factors noted when compared to a control group of 103 patients (using a stepwise logistic regression model) were number of medical problems (P = 0.0128; OR = 1.4; 95% CI, 1.1 to 1.9) and number of previous admissions (P = 0.005; OR = 1.6; 95% CI, 1.2 to 2.3). **Conclusion:** Unplanned readmissions are relatively common in elderly patients. They cannot be entirely prevented in view of multiple chronic illnesses. Further studies, looking at early detection of medical problems and prevention of nosocomial infections are warranted to decrease the problem of readmissions for this group of elderly.

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