Abstract

Background: The population of Hong Kong and the proportion of elderly people have been increasing rapidly. The aim of this study is to determine predictive factors for psychiatric rehospitalization within 2 years among elderly patients who were discharged from the psychiatric wards. This will help psychiatrists to identify patients who required detailed discharge planning, in attempt to reduce their rehospitalization rate and to reintegrate them into the community.

Methods: Patients aged 65 and over, who were discharged from the psychiatric wards of Pamela Youde Nethersole Eastern Hospital from 1 March 2010 to 29 February 2012, were identified. Rehospitalization within 2 years after discharge was the primary outcome measure, and the time to rehospitalization was measured as the secondary outcome. Patients were naturalistically subgrouped into the readmitted group and non-readmitted group. Multiple logistic regression and Cox regression were applied to the potential predictive factors with odds ratios and hazard ratios obtained respectively for the significant findings. Kaplan-Meier survival curves were plotted for graphical representation of the study results in survival analysis.

Results: 368 individuals satisfying the study criteria were identified. The same four factors were shown to be significantly associated with rehospitalization in both multiple logistic regression and Cox regression survival analysis, including referral to other psychiatric disciplines upon discharge ($p < 0.001$, OR=0.325, HR=0.405), history of suicidal behaviors ($p < 0.001$, OR=4.906, HR=3.161), history of violent behaviors ($p < 0.001$, OR=5.443, HR=3.935) and number of previous psychiatric admissions ($p < 0.001$, OR=1.250, HR=1.121).

The rehospitalization rate of elderly patients was 5.2% at 1 month, 9.5% at 3 months, 15.0% at 6 months, 17.1% at 1 year, 18.8% at 1.5 year and 20.9% at 2 years.

Conclusions: Referral to other psychiatric disciplines upon discharge was associated with a lower rehospitalization risk and correlated to a longer time to rehospitalization. History of suicidal behaviors, history of violent behaviors and greater number of previous psychiatric admissions were associated with a higher rehospitalization risk and predicted earlier rehospitalization.