

**Time to Readmission is Increased
in Voluntary and Compulsory Psychiatric Inpatients
with a Therapeutic Leave**

ABSTRACT

Introduction: Therapeutic leave (TL) has long been an integral part of psychiatric inpatient care. It is commonly considered indispensable in helping patients re-adjust to their daily lives. Yet, there is lack of scientific evidence of its therapeutic benefit. Repeated psychiatric readmissions are a burden on health care systems and may place considerable strain on patients and their relatives. Risk factors of readmission have been studied extensively. As we consider TL as a therapeutic intervention, we hypothesized TL to be a protective factor prolonging the time to readmission. Therefore, we aimed to examine the association between TL (yes vs. no) during inpatient treatment and the time to readmission.

Method: Clinical routine data from 3,302 patients admitted to the Psychiatric University Clinics Basel between January 1st, 2018, and April 15th, 2020, was examined. The Kaplan-Meier curve was used as a graphical approach to compare the survival time of patients with and without TL. In a next step, a Cox regression model was applied, taking into account other covariates commonly associated with the time to readmission.

Results: The Kaplan-Meier curve indicated longer cumulative survival in the group with TL. Results of the log-rank test showed that this effect was significant ($\chi^2(1) = 18.8, p < .05$). The Cox regression further indicated that receiving a TL was significantly associated with longer time to readmission (.737 [.641, .848], $p < 0.001$; hazard ratio [95% CI], p). Another covariate associated with an increased time to readmission was admission due to mandated treatment (FU) (.758 [.617, .932]). Covariates significantly associated with a decreased time to readmission were a history of at least one admission in the last 2.5 years before the index stay (1.005 [1.004, 1.005], $p < 0.001$), higher HoNOS symptom levels at admission (1.029 [1.018, 1.039], $p < 0.001$), comorbidity (1.171 [1.018, 1.348], $p = 0.027$), and a diagnosis with schizophrenia-spectrum disorders (1.386 [1.151, 1.670], $p = 0.001$).

Conclusion: Our findings suggest a link between TL during inpatient treatment and the time to readmission. A potential positive effect of TL enhancing the recovery of patients might be assumed. Future research in this field could apply experimental and/or qualitative studies to deepen the understanding of the underlying mechanisms of TL.

(364 words)

Keywords: pass; therapeutic leave; readmission; inpatient; psychiatry; TARPSY