Retrospective Analysis of Risk Factors for Suicide Attempts in a Large Population of Psychiatric Inpatients

C. Norra[1], D. Schaub[1], G. Juckel[1], M. Schmieder[1]

[1]Psychiatry Psychotherapy and Preventive Medicine, LWL University Hospital, Bochum, Germany

As opposed to suicide that is officially registered risk factors for suicide attempts are more difficult to establish. Therefore, a large data set of inpatients in a university hospital was transformed and analyzed for accompanying risk factors at admission of suicidal patients.

Apart from standard hospital data additional items were also derived from medical records and follow-up entries. The initial data file consisted of 16,895 data sets (i.e., hospitalizations) from year 1985 until 2005 that was transformed into a final file with 5,146 consistent data sets covering 233 variables. The analysis is based on a main group classification into suicide attempts 'positive" and suicide attempts 'negative". Statistical analysis was done with Mann-Whitney-U-Tests, CHI2, correlation coefficients (r and φCOLE) and logistic regression.

Patients with suicide attempts were significantly younger and were at higher risk for personality disorder (RR=1.69, p<0.001), affective disorder (RR=1.49, p<0.001) and neurotic disorder (RR=1.37, p<0.001). Male individuals and those with repeated suicide attempts used the more severe methods. Further risk factors included suicidality at admission, childhood trauma or abuse, and suicide of related parties (RR´s between 1.39 and 3.07). Patients with suicide attempts showed higher numbers of hospitalizations though shorter duration of their inpatient treatment than patients without suicide attempts.

By means of a large and elaborated data file of inpatients a profile of risk factors for attempted suicide was identified providing a basis for more close intervention during inpatient treatment and thereafter.