

## **Suicidal behaviors among adolescent inpatients: A 10 year retrospective naturalistic study**

Maya Amitai<sup>1,2,3</sup>, Reut ben Baruch<sup>1</sup>, David H Ben-Dor<sup>1,2</sup>, Dorit Ben-Ami<sup>1</sup>, Michael Kats<sup>1</sup>, Roi Sagie<sup>1</sup>, Roi Remez<sup>1</sup>, Noam Liav<sup>1</sup>, Moran Leibovich<sup>1</sup>, Alan Apter<sup>2,3</sup>, Abraham Weizman<sup>2,3,4</sup>, Gil Zalsman<sup>1,2,3,4</sup>

<sup>1</sup> Geha Mental Health Center, Petah-Tikva, Israel

<sup>2</sup> Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

<sup>3</sup> Department of Psychological Medicine, Schneider Children's Medical Center of Israel, Petach Tikva, Israel

<sup>4</sup> Felsenstein Medical Research Center, Sackler Faculty of Medicine, Tel Aviv University, Petah Tikva, Israel

<sup>5</sup> Department of Psychiatry, Divisions of Molecular Imaging and Neuropathology,

Columbia University, New York, New York, USA

### **Abstract**

**Objective:** The objective of the present study is to examine specific characteristics of adolescent inpatients admitted to an adolescent psychiatric ward in a mental hospital due to suicidal behaviors (SBs) through a comprehensive retrospective analysis of medical records. Our hypothesis was that adolescents admitted due to suicide attempts (SA) will have a higher burden of psychopathology and a higher rate of SA during the hospitalization period as compared to adolescents admitted due to self-injurious behaviors (Non Suicidal Self-Injury, NSSI) or Suicidal Ideation (SI). We also wanted to identify predictors for committing a SA while hospitalized.

**Method:** We identified all the cases that were hospitalized in an adolescent inpatient psychiatric ward due to SBs between the years 2001-2010. These patients' medical records were screened and coded for several clinical and demographic parameters which are known to be risk factors for SBs, including, a lifetime history of drug use and a lifetime history of

NSSI. The Columbia Classification Algorithm of Suicide Assessment (C-CASA) and the Brown-Goodwin Lifetime Aggression Scale (BGLAS) were also extracted from the files.

**Results:** Medical records of 123 (54% female) consecutive patients admitted due to SBs, aged 10–26 years ( $M= 15.86$ ,  $SD=2.12$ ) were identified. Fifty six patients (45%) were admitted due to SA and 67 (55%) were hospitalized due to SI or NSSI. Ten children committed a SA while hospitalized. No differences were found between the groups regarding age, gender, socio-economic status, and length of hospitalization, diagnoses, history of abuse, history of NSSI or history of drug use. Age, a history of drug use, length of hospitalization and a previous SA were associated with SA while hospitalized.

**Conclusions:** It seems that age, history of drug use, length of hospitalization and a previous SA should be included in risk assessment of any hospitalized adolescent with SB. Hospitalization length can be a marker for severity but also a risk factor. Further studies should address the question of the relationship between long hospitalizations and increased risk for SA and completed suicide.