

## The Relationship between Self-Injurious Behavior and Manner of Death

**Authors :** Sait Ozsoy, Hacer Yasar Teke, Mustafa Dalgic, Cetin Ketenci, Ertugrul Gok, Kenan Karbeyaz, Azem Irez, Mesut Akyol

**Abstract :** Self-mutilating behavior or self-injury behavior (SIB) is defined as: intentional harm to one's body without intends to commit suicide". SIB cases are commonly seen in psychiatry and forensic medicine practices. Despite variety of SIB methods, cuts in the skin is the most common (70-97%) injury in this group of patients. Subjects with SIB have one or more other comorbidities which include depression, anxiety, depersonalization, and feeling of worthlessness, borderline personality disorder, antisocial behaviors, and histrionic personality. These individuals feel a high level of hostility towards themselves and their surroundings. Researches have also revealed a strong relationship between antisocial personality disorder, criminal behavior, and SIB. This study has retrospectively evaluated 6,599 autopsy cases performed at forensic medicine institutes of six major cities (Ankara, Izmir, Diyarbakir, Erzurum, Trabzon, Eskisehir) of Turkey in 2013. The study group consisted of all cases with SIB findings (psychopathic cuts, cigarette burns, scars, and etc.). The relationship between causes of death in the study group (SIB subjects) and the control group was investigated. The control group was created from subjects without signs of SIB. Mann-Whitney U test was used for age variables and Chi-square test for categorical variables. Multinomial logistic regression analysis was used in order to analyze group differences in respect to manner of death (natural, accident, homicide, suicide) and analysis of risk factors associated with each group was determined by the Binomial logistic regression analysis. This study used SPSS statistics 15.0 for all its statistical and calculation needs. The statistical significance was  $p < 0.05$ . There was no significant difference between accidental and natural death among the groups ( $p = 0.737$ ). Also there was a unit increase in number of cuts in psychopathic group while number of accidental death decreased (95% CI: 0.941-0.993) by 0.967 times ( $p = 0.015$ ). In contrast, there was a significant difference between suicidal and natural death ( $p < 0.001$ ), and also between homicidal and natural death ( $p = 0.025$ ). SIB is often seen with borderline and antisocial personality disorder but may be associated with many psychiatric illnesses. Studies have shown a relationship between antisocial personality disorders with criminal behavior and SIB with suicidal behavior. In our study, rate of suicide, murder and intoxication was higher compared to the control group. It could be concluded that SIB can be used as a predictor of possibility of one's harm to him/herself and other people.

**Keywords :** autopsy, cause of death, forensic science, self-injury behaviour

**Conference Title :** ICFS 2015 : International Conference on Forensic Sciences

**Conference Location :** London, United Kingdom

**Conference Dates :** June 28-29, 2015