



### D83 Suicide in Children: A Study in Northern Portugal

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After attending this presentation, attendees will understand information related to suicidal behavior in children and adolescents and make them aware about the need for more education, specifically by promoting a thorough psychological autopsy in these cases.

This presentation will impact the forensic science community by shedding light on a poorly studied area of forensics in northern Portugal, the issue of child and adolescent suicide, emphasizing the requirement to develop understanding in managing autopsy cases to be supported by specific strategies.

Suicide is among the leading causes of death worldwide and is the second leading cause of death between 10 and 24 years old. Suicide behavior includes a wide spectrum of acts, with males tending to choose methods with more lethal effectiveness, making them more likely to perform a complete suicide. Lack of information about some circumstances of the death, namely underlying psychopathologic disorders and the behavioral impulse, contribute to the suicidal act; this can create flaws concerning the method of the psychological autopsy. Portuguese forensic aspects on child and adolescent suicides are unknown, so that was the aim of the present study.

Data on autopsy reports of suicide cases of people under 18-years-old at the North Services of the National Institute of Legal Medicine and Forensic Sciences of Portugal, from 2004 to 2011, including toxicological results, were obtained, and psychological autopsy data and police reports were analyzed. A total of 16 cases were found, with a male predominance (68.8%) and an age range from 12 to 17-years-old (mean age  $15.25 \pm 1.13$ ). All victims but two were Caucasian. The leading suicide method was hanging ( $n=6$ ), followed by shooting ( $n=3$ ), and jumping in front of an oncoming train ( $n=3$ ). A greater number of suicides ( $n=9$ ) took place between June and September. Seven cases occurred in public areas and six at the victim's home. Alcohol intoxication was observed in two victims (blood alcohol concentration  $> 1.0g/L$ ), both males, who committed suicide by jumping in front of an oncoming train. Psychological autopsy was performed in only 10 cases, which can be explained by the difficulties of forensic professionals leading during a quite early stage of grief, and also by the fact that family and friends of the victims are having trouble with providing accurate information in that moment, since they aren't able to cope with the pain, which affects and impairs their memory and concentration. This suffering can lead to feelings of blame, associated with inaptitude of accepting the suicide event. Therefore, it's highly important to develop specific competencies for the forensic professionals for this type of approach, namely in early stages of the grief process. These are some of the aspects which could explain why the main reason for suicide was not possible to determine in most cases.

Although suicide in children and adolescents is a rare event, it remains a rather important issue of public health, and should not be overlooked. Such events are probably motivated by acts of impulsiveness, thus these acts are usually unpredictable and come as a surprise to the family and friends of the victims. The chosen methods tend to be more violent than in other age groups, namely in males, which explains the gender predominance. It is of paramount importance to assure the correct course of action regarding the psychological autopsy in these cases, as well as the availability of information regarding the victims, including reviewing of the clinical history, social and emotional background, hence creating a more complete profile of these victims and maximizing the accuracy of the forensic diagnosis. This is the first study of suicide in victims under 18 years of age in the north of Portugal, and offers unique information for future programs of suicide prevention in this country and a basis for further and needed research. Prevention strategies should focus on controlling the main risk factors, namely awareness of underlying psychiatric pathologies, acts of impulsive aggression, family history of suicide, history of physical or sexual abuse, or poor relationships with parents and peers, as well as restricting the access to lethal methods, therefore promoting early assessments leading to targeted interventions and reducing the risk of suicidal behavior.

#### **Suicide, Children, Risk Factor**