



## D5 A Typology of Voluntary Assault and Battery Upon Children Under the Age of 15 and Factors Associated With the More Severe Cases: A Three-Year Retrospective Study in a Lyon University Hospital, France

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After attending this presentation, attendees will become aware of a particular type of physical violence perpetrated against children in the last three years in the third largest French town.

This presentation will impact the forensic science community by pointing out the factors associated with the more severe cases of voluntary assault and battery upon children under the age of 15.

**Objectives:** The United Nations Children's Fund research has recently estimated that almost 3,500 children under the age of 15 die from physical abuse and neglect every year in the industrialized world; the greatest risk being among younger children. According to the National Observatory on Social Decentralized Action, almost 19,000 children experienced either physical or psychological violence in 2006 in France. As the only systematically collected data in legal proceedings concerning violence perpetrated in the family, such statisctics were biased and much of the violence against children remained under- recorded. A retrospective study was conducted over three years in Edouard Herriot's Hospital in Lyon, France, to describe voluntary assault and battery upon children under the age of 15 and to investigate the factors associated with the more severe cases.

**Methods:** All children under the age of 15 who were examined in the forensic consultation for voluntary physical or psychological assault and battery between January, 1 2005 and December 31, 2007 were retrospectively included. All victims of sexual assault were excluded. For each case, demographic characteristics, aggression history, medical, and forensic data were collected from medical records according to a standardized data collection form. Victims were classified as severe if the injury prevented normal daily activity for more than eight days. Severe cases were compared to mild cases using Chi2 or non-parametric tests. Multivariate logistic regression was used for risk factors' identification. Statistical analyses were performed with SPSS for Windows, version 12.0.

**Results:** Among the 193 children included (62.2% male, median age of 8.0, range 0.5 to 15), 34 (17.6%) severe cases were reported. The average number of days being prevented from daily activity was 4.75 (range 0 to 45).

Factors independently associated with a severe case after multiple logistic regression were:

- Separated or divorced parents (0R=0.27; IC95% 0.07-1.01; p=0.05)
- Children attending school (OR=0.07; IC95% 0.01-0.44; p<0.01)</li>
- Non-family young offender under the age of 18 (OR=14.2; IC95% 3; 6.7; p<0.01)
- Aggression at home (OR=0.19; IC95% 0.04-0.95; p=0.04)
- Punched or kicked children (OR=0.09; IC95% 0.02-0.46; p<0.01)
- Traumatic wound (OR=18.3; IC95% 2.16-154.7; p<0.01)</li>
- Arm wound (OR=3.9; IC95% 1.07-14.1; p=0.04)

**Conclusion:** Differences between severe and mild case characteristics exist wherever sociological or aggression-related factors are considered. The lower proportion of severe injuries perpetrated at the young victim's home may reflect most physical violence against children in the family, which usually does not cause serious visible physical injury and often requires repeated incidents to allow community-based or legal interventions. Non-family, young offenders under the age of 18 and victims not attending school are two significant factors associated with severe cases. These results first illustrate youth violence which has dramatically increased worldwide in the last two decades without being confined to any one subgroup of the youth population. Finally, this study underlines the importance of schooling and school quality to prevent such kind of violence.

## Physical Violence, Child, Risk Factors