

## POSTER 63

### Negligent homicide in the context of a vehicle accident and its impact on mental health

Beatriz Ala-Silva Lourenço<sup>1</sup>, Maria Vidal-Alves<sup>2-3</sup>, Paulo Vieira Pinto<sup>3</sup>

<sup>1</sup>TOXRUN – Toxicology Research Unit, University Institute of Health Sciences, CESPU, CRL, 4585-116 Gandra, Portugal University Institute of Health Sciences - CESPU, Gandra, Portugal.

<sup>2</sup>Department of Public Health and Forensic Sciences, and Medical Education, Faculty of Medicine, University of Porto, Porto, Portugal.

Doi: <https://doi.org/10.51126/revsalus.v4iSup.330>

#### Resumo

**Introduction:** While being one of the most prevalent causes of death in Portugal, as well as globally, the rate of deadly motor vehicle accidents (MVA) is rising in developing countries. The origin and effects of deadly MVAs are understudied especially considering those of neglectful nature. In such cases, besides the legal judgment, the psychological consequences on both victims and perpetrators, as well as the social and economic impact, are of great concern. The psychological consequences of taking someone else's life without intent, are frequently overlooked in MVAs. Nonetheless, PTSD has been positively associated in both cases, as well as major depressive episodes. On the other hand, driving related phobias, reoccurring distress/anxiety and overwhelming feelings of guilt and shame were related to traumatized drivers. **Objectives:** To understand the etiology and psychological consequences of involuntary homicide during a MVA, to guide future interventions. **Methods:** A literature search was performed using the following keywords: involuntary homicide, vehicle accident, vehicular manslaughter, negligent, mental health, psychological consequences. The scientific databases were PubMed, Google Scholar and Web of Knowledge. Since the absence of recent significant investigations was evident, the time

interval was broadened to the last 25 years. The selected articles were of quantitative nature, using questionnaires, structured interviews, and semi structured interviews. **Results:** The diagnose of post-traumatic stress disorder (PTSD) was a transversal repercussion in the observed studies about those involved in MVA. Lowinger & Solomon found that, of 38 drivers, 76.3% were diagnosed with PTSD, 54.4% found themselves accountable, and 18.2% blamed circumstances, while 15.7% alleged bad luck and 11.7% someone else. Two positive correlations were prominent: between perceived responsibility and symptoms of PTSD (with greater guilt) and shame related to the belief that the accident could have been avoided. Lenient sentences led to higher rates of guilt, shame, and PTSD symptoms, with the latter being higher after witnessing the death. Another study found that in 188 MVA victims, 1/5 suffered acute stress syndrome and 1/10 developed PTSD and mood disorders. Emotional distress, anxiety, depression and phobic travel anxiety were also commonly reported. **Conclusions:** Amongst 20 retrieved articles, only one was found focused on reckless drivers' mental health, having caused someone's death. Therefore, it's crucial to develop further investigations to truly comprehend the underlying impact of this occurrence.

**Keywords:** fatal accident; negligence; mental health; criminal responsibility; liability; psychological trauma

#### References:

- [1] Lowinger, T., & Solomon, Z. (2004). PTSD, guilt, and shame among reckless drivers. *Journal of Loss and Trauma*, 9(4), 327–344.
- [2] Dahl, R. (2004). Vehicular Manslaughter: The Global Epidemic of Traffic Deaths. *Environmental Health Perspectives*, 112(11).
- [3] Kristensen, P., Weisæth, L., & Heir, T. (2012). Bereavement and Mental Health after Sudden and Violent Losses: A Review. *Psychiatry: Interpersonal and Biological Processes*, 75(1), 76–97. <https://doi.org/10.1521/psyc.2012.75.1.76>
- [4] Mayou, R., Bryant, B., & Duthie, R. (1993). Psychiatric consequences of road traffic accidents. *BMJ*, 307(6905), 647–651.
- [5] Gudmundsdottir, B., Beck, J. G., Coffey, S. F., Miller, L., & Palyo, S. A. (2004). Quality of life and post trauma symptomatology in motor vehicle accident survivors: the mediating effects of depression and anxiety. *Depression and anxiety*, 20(4), 187–189.