Letters to Editor

Motor vehicle accidents: The physical versus the psychological trauma

Dear Editor,

Motor vehicle accidents (MVAs) are traumatic events that are both unfortunate and dramatic.[1] Almost 1.3 million people die annually on the roads all over the world, and between 20–50 million people sustain nonfatal injuries.[2,3] According to the 2008 WHO global status report, over 90% of the world’s fatalities on roads occur in low-income and middle-income countries that possess 48% of the world’s vehicles.[4]

Traffic reports present the rates and death tolls of MVAs rather than the underneath psychological residues on MVA victims. MVAs can lead to a wide array of acute and chronic psychological consequences that may be sustained for months after the incident.[5] Posttraumatic stress disorder (PTSD) was identified in up to 6 months post-MVAs, with a prevalence between 4% and 25.4%.[5] Recent studies have shown substantial psychiatric morbidity after serious MVA accidents, with the risk for acute PTSD 4.64 times higher among women compared to men.[1]

Seven PTSD predictors were identified: (a) prior history of trauma, (b) previous psychological problems, (c) psychopathologies in the family, (d) perceived threat to life, (e) perceived support posttrauma, (f) peritraumatic emotional responses, and/or (g) dissociation. Peritraumatic dissociations mainly include reactions of distress or negative emotions such as being helpless, sad, frustrated, or angry. They also involve a perceived life-threat (to self or others) and physical distress such as sweating, shaking, and pounding heart.[2]

The physical injury and complex psychological structure can be evaluated by various research tools.[1,5] The Injury Severity Score is a widely adopted anatomical scoring system that provides an overall score for patients with multiple injuries and correlates the scores with the mortality, morbidity, hospital stay, and other measures of severity. The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) has a fairly restrictive diagnostic criteria of PTSD.[6] The Mini International Neuropsychiatric Interview detects - in the more or less short-term - the psychological disorders described in axis I of the DSM-IV, whereas the Peritraumatic Distress Inventory assesses the emotional responses of patients during and immediately after the traumatic event.[5] The Peritraumatic Dissociative Experience Questionnaire (10 Self-report Version) is a scale for retrospectively evaluating the dissociative elements of the subject’s conscience at the time of the trauma and in the following minutes. Other tools, such as the Clinician-Administered PTSD Scale, assess the frequency and the intensity of posttraumatic symptoms according to the criteria of the DSM-IV. This widely used tool exhibits excellent metrological qualities.[5]

There were seldom attempts to utilize these tools on MVA victims. Investigators ought to evaluate the peritraumatic experience (extent of distress and dissociation) at the time of MVAs. Studies shall follow up on MVA victims by investigating PTSD 1, 6, and 12 months after the event. Peritraumatic distress and dissociation might be proven scientifically as actual predictors of MVAs. Highlighting the psychotraumatic impact of MVAs and its subsequent consequences to the community might boost the awareness and adherence of drivers with safer traffic regulations.

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