ASSESSMENT OF POSTTRAUMATIC BODILY INJURY IN ROAD ACCIDENTS – LEGAL AND MEDICO-LEGAL CRITERIA

Cristi A. Stan1,*, C. Codescu2

1“Mina Minovici” National Institute of Legal Medicine, 2Road Victims Association - AVAC, Bucharest, Romania

Abstract. Bodily injuries caused in road accidents can affect the life of the victims for a certain period of time or permanently. In relation to this damage, the legal doctrine includes the existence of bodily damage that reveals the impact of the traumatic event in the life of the victim, damage whose assessment involves an interdisciplinary approach.

Aspects such as functional deficit (temporary or permanent), pain felt by the victim, aesthetic damage or sexual damage, which represent subcategories of bodily damage, must be evaluated scientifically with the support of legal medicine.

In the practice of the courts, the evaluation of bodily harm is done in most cases according to the criteria of the criminal code regarding bodily harm and not according to the specific criteria of civil law that refer to the harm. This factual situation is possible due to the lack of a legal nomenclature that contains the classes of physical or mental injuries that are part of bodily injury, but also due to the absence of medico-legal scales specifically adapted for this area of justice.

This paper highlights the particularities of bodily injury and the needs from both the legal and medico-legal areas for a correct assessment in order to establish a fair compensation for the victim of the road accident.

Keywords: bodily injury, legal and medico-legal evaluation criteria, road accident.

INTRODUCTION

Traffic accidents which result in certain persons suffering bodily injuries are the subject of cases settled based on the judicial procedures specific to criminal law, but also to civil law.

Injuries suffered in such events represent violations of the fundamental right to physical and mental integrity and require compensation for the incurred damage under the rules of civil law.

This type of damage represents, according to a modern classification from the legal doctrine, a bodily injury, which has a mixed nature, with a dual combination: a patrimonial side represented by losses of economic nature and a moral side materialized in the pain suffered (pretium doloris), injury to the affection (pretium affectionis) [1].

As the bodily injury takes many forms of manifestation given the infinite individual variability, the issue of its repair is complicated and, equally, complex, requiring an interdisciplinary approach.

Apparently, the patrimonial side of the damage or material damage should not raise major issues of evaluation and compensation as it takes into account those losses, damages to the property of the injured person, quantifiable in money, which can be proven.

The extra-patrimonial component, which covers the achievement of the values that concern the person and his/her physical, emotional or social personality, always present in a bodily injury, is much more difficult to assess and tests the scientific acquisitions, the competencies and, equally, the experience or sensitivity of the magistrate [2].

But what are the main needs in the legal field that would enable the assessment and the compensation of such bodily injury, with emphasis on the non-patrimonial side, also taking into account the fact that the bodily injury is singular (through the forms of manifestation of the injuries), different in the socio-professional context of each victim) and is often irreparable or with consequences difficult to discern in time [2]?

LEGAL CRITERIA

The positive law in our country does not provide
Assessment of posttraumatic bodily injury in road accidents– legal and medico-legal criteria

Criteria for assessing the injury in order to compensate the injured persons. For such situations, the Code of Civil Procedure establishes that the case must be judged on the basis of the general principles of law, taking into account all the circumstances of the case, considering the requirements of fairness [3]. The same Code of Procedure regulates the “role of the judge in finding the truth”, by expressly stipulating that “The judge has the duty to insist, by all legal means, to prevent any mistake regarding the finding of the truth in the case…”[4].

At the same time, the European Court of Human Rights - ECHR, through a relevant case-law, underlined that the assessment of moral damages does not operate with predetermined evaluation criteria [5] but is judged in equity, that is, a subjective assessment of the particular circumstances of the case, as they are highlighted by the evidence administered.

In the coordinates of the ECHR jurisprudence and in view of the general principles of law enforceable in such cases, the Romanian Supreme Court established, as a principle, certain helpful criteria on the basis of which judges can set up a particularization of the case and compensation of the victim. Therefore it talks about:

- the negative physical and mental consequences incurred by the victim;
- the importance of the values damaged and the extent to which these values were damaged;
- the intensity with which the consequences of the injury were perceived;
- the duration of the consequences of the injury;
- the extent to which the family, occupational and social situation has been affected [6].

The analysis is based, in order to compensate for the bodily injury on the principle of proportionality which, in such cases, helps us identify the intensity or severity of the trauma considering the negative aspects incurred by the victim from the physical and psychological point of view and the duration these affect the victim’s life. In other words, it needs to be legally clarified whether the prejudice is temporary and if yes, what is the duration thereof or whether the prejudice is permanent.

Depending on this classification required to validate the legal principle of proportionality, we need to understand and compensate the victim’s pains, the increased efforts to cover the life needs and the limitations that severely influence the victim’s (the sexual prejudice, the deprivation of any normal-life project, the aesthetic prejudice, etc.), occurred further to the damages to the physical and psychological integrity and health, following the road accident.

The medical sciences in the traumatology field show that most often, trauma causes lesions that evolve during a period of time, and which have a different impact on the patient’s life depending on several aspects, both medical as well as psychological and sociologic.

The progress of the injuries may consist in a full recovery, biologically stabilized, both at tissue level and in terms of victim's functionality, after a certain time period and, in this case, we refer to temporary prejudice. To the contrary, the injuries may lead to the aggravation of the health condition or to the occurrence of permanent functional after-effects or limitation which will irremediably influence the file of the injured person, and in this case, we face permanent prejudices.

The French legal doctrine also defines evolutionary prejudices [7], defined by the modification in time of the manifestation of the lesions and/or symptomatology, an aspect that requires a different approach since the non-patrimonial component predominates.

In relation to these particularities the posttraumatic prejudice is assessed in order to compensate the material and moral damages incurred by the victim.

In the case of non-patrimonial prejudices, the assessment considers the moment the traumatic lesions are stabilized. Of course, such moment is not identified as the period corresponding to the days of medical care provided by the Romanian criminal law since the intention is to follow up not only the tissue healing of the lesions but also the functional healing occurred further to the exhaustion of all the specific medical procedures.

When an optimal stabilization interval of the injury is exceeded, we speak of a definitive bodily injury, in which case the duration of the victim’s life is shown by reference to the victim’s age at the time of the accident and the average life expectancy.

By outlining the extent of the prejudice, we can proceed to identify the concrete aspects of the victim’s life impairment. Although there are, as we have shown, adequate guidelines for lawyers, and in particular for judges, for going through the two stages of the process of compensating the victim, i.e. the assessment of the prejudice and the establishment of the compensation, the actual process is marked by difficulties concerning both the legal side and the side of the science of justice, in particular that of forensic medicine.
With regard to the legal field, the bodily injury should be understood as the sum of the damages that highlight each category of problems arising post-traumatically and affecting the victim’s life. A possible nomenclature of these injuries, currently non-existent in national legal doctrine in Romania, would significantly facilitate the lawyers’ work.

In several European countries, such nomenclatures exist as guidelines for legal specialists, but their potential enforcement, through the transposition thereof into the Community law, could give rise to legal conflicts with the human rights legislation and case law. This is why at present such nomenclatures cannot be enforced uniformly in all EU countries but are only found in the doctrine of certain European states where they are correlated with the specific case law of each country. The purpose of developing a legal nomenclature for the assessment of bodily injury is to respond to the victims’ needs, which are waiting for an optimal identification and predictability in terms of compensable personal injury [8].

Next, we will present a component of the guiding nomenclature referred to by the French doctrine as Dintilhac [9], more precisely, the category of temporary and permanent extra-patrimonial damages:

I. Temporary non-patrimonial damages
   - Temporary functional impairment;
   - Temporary recreational damage;
   - Temporary suffering;
   - Temporary aesthetic damage;
   - Temporary exceptional damage.

II. Permanent non-patrimonial damages:
   - Functional impairment;
   - Recreational damage;
   - Aesthetic damage;
   - Sexual damage;
   - Permanent damage consisting in the impossibility of achieving a normal personal/family life project;
   - Exceptional permanent damage.

These subdivisions of personal injury cover the whole range of activities and life situations affecting road accident victims.

Thus, in the category of functional impairment, we find aspects of impairment of family life concerning the household, self-care, professional life as the professional activity can be continued after the traumatic event however with increased efforts, social life. Unfortunately, the phrase “functional impairment” is exceptionally found in medico-legal evaluations in Romania, which is why it is often foreign to legal specialists.

Regarding aesthetic damage, which is found in the French doctrine in the category of both temporary and permanent damage, we note that in our country there is still confusion between this and the medico-legal criterion for assessing the severity of an injury laid down in the criminal law, namely “serious and permanent aesthetic damage”. In the light of this confusion, the temporary aesthetic damage, as a subcategory of physical injury, is often omitted from the legal assessment.

Three elements are assessed in the category of sexual injury: morphological injury, which concerns damage to the sexual organs; injury relating to sexual intercourse (loss of libido, reduction or loss of the ability to perform sexual intercourse); injury relating to the impossibility or difficulty of procreation. Specifically, the personal circumstances of each victim should be taken into account (age, marital status, the fact that, as a result of the offence, the person is young, sterile, childless and not married) [2].

The lack of a nomenclature of categories of personal injury in the national legal doctrine has influenced the process of assessment and fair compensation of victims. Thus, although in this process the impact of the traumatic event on the victim's life must be highlighted based on civil law rules, in practice, a significant proportion of the criteria laid down in the Criminal Code in the Chapter on Offences against Bodily Integrity or Health are used [10].

It is important to point out that forensic medicine cannot solve the problems faced by the legal sciences on its own initiative, since forensic medicine is “the science whose light helps to avoid, as far as possible, miscarriages of justice and helps the science of law to find a fair solution whenever it is unable to do so by its own means”, as Prof. Mina Minovici emblematically pointed out.

Consequently, we can say that the legal sciences have a primary role to play in identifying problems whose solution requires the opinions or modern studies of forensic specialists.

It cannot be denied that, currently, there is also a lack of scientific dialogue between the legal and medico-legal fields, which would be particularly useful for constantly linking developments in legal science with the latest medical findings.

Furthermore, the lack of regulation of the institution of the independent forensic expert, which is essential to guarantee a fair trial, is another major legislative shortcoming for which the Romanian State
Assessment of posttraumatic bodily injury in road accidents: legal and medico-legal criteria

MEDICO-LEGAL CRITERIA

Medico-legal Assessment of the Injuries Severity and Post-Traumatic Physical Harm

From the point of view of medico-legal theory, the methodology for assessing the severity of traumatic injuries and post-traumatic physical damage essentially uses the morphological diagnostic criterion for traumatic injuries, i.e. the type of injury correlated with the average time required for the biological healing of the most serious injury; this period is conventionally established for certain categories of injury (bruises, excoriations, some fractures, sprains, dislocations, etc.).

In some more severe cases, which require medical rehabilitation treatment over long periods, the first criterion is supplemented by that of the treatment for residual functional disorders, which is particularly common in the case of osteo-tendinous injuries of the large joints or when there are permanent neurological after-effects.

It should be pointed out that the medico-legal assessment of the bodily injury, which is based almost exclusively on the provisions of the criminal code, does not use the criteria of physical pain, the number of days of hospitalization or the number of days of temporary incapacity for work (medical sick leave).

Moreover, the criterion of the number of days required to treat comorbidities is used only when these conditions directly influence the healing of traumatic injuries or the injuries themselves cause complications of pre-existing underlying conditions, leading either to an increase in the healing period of the injuries or to their poor healing.

Another aspect of these assessments based on the number of days of medical care (set out in the conclusions of the medico-legal act) is that this number of days is awarded on the basis of the most serious traumatic injury, without adding up all the days of medical care awarded for each individual traumatic injury.

Over the years, a number of indicative scales have been drawn up to assess the number of days of medical care that can be provided for the various types of traumatic injuries, which are based on statistical criteria, considering the usual course of healing processes for most people who have suffered an injury similar to the one being assessed.

These scales represent only a quantification of the severity of the injury caused by the trauma and not an assessment of the actual period of medical treatment that the victim needs until the injuries heal or their evolution is definitively stabilized (sometimes with the occurrence of after-effects).

For this reason, the scales are not absolute but only indicative, given the emergence of ultra-modern methods of treatment in recent years, which can help to remedy or functionally compensate for certain disabilities, but which are often inaccessible due to the very high costs.

Another medical criterion used in the assessment of the physical prejudice in civil cases refers to invalidity, a notion that includes both days of temporary invalidity and definitive invalidity but which in the Romanian medical practice is related to the capacity to work and less to adaptive incapacity.

In a classic sense, disability is defined as a medically confirmed incapacity which establishes that the prejudice incurred has an impact on the functions of the victim's human body.

It should be noted that in current medico-legal practice the criterion of infirmity, which refers exclusively to the criminal assessment of the severity of a physical or mental injury, is used much more frequently than the notions of disability or incapacity which assess the bodily injury definitively.

Medico-legal Assessment of the Severity of a Bodily Injury

The assessment of the severity of the bodily injury should cover several medical areas and is best finalized after the traumatic injuries have healed (after the “consolidation” thereof) when the permanent after-effects can be assessed.

This medico-legal assessment of the bodily injury should include several stages of clinical and functional medico-legal diagnosis:

- Assessment of the severity of the post-traumatic morpho-functional impairment and of its temporary or definitive character
- Assessment of the severity of the aesthetic prejudice and of its temporary or definitive character.
- Assessment of the sexual injury, insofar as it can be objectified.
- Assessment of the potential for future aggravation of the post-traumatic after-effects, and subsequent periodic reassessments by specialists (ENT, ophthalmology, orthopaedics, etc.) may be recommended. These issues are most common in infections or progressive injuries caused by chemicals or physical agents.
- Medical assessments of physical or mental restrictions on recreational activities only when required by the court.

**Traumatic-Points Criterion**

The compensation of the victim by amicable settlement will be made based on a trauma score which takes into account a presumed average level of suffering incurred by the injured persons and which will only include injuries related to physical pain [13].

In the pain rating scales this is quantified using criteria specific to the insurance medicine, depending on:
- duration of hospitalization;
- duration of immobilization;
- surgical procedures applied (under local or general anesthesia);
- duration of the rehabilitation and number of sessions;
- psychotropic treatment and/or psychological therapy applied for what period of time.

The currently proposed rating scale [14] is an adaptation of the medico-legal injury scales and the number of days of medical care provided for different categories of traumatic injuries. As designed, this scale does not include criteria or methods for assessing many categories of functional impairments, adaptive disability, invalidity, or other post-traumatic disabilities.

**Proposal for a Single European Disability Assessment Scale**

At EU level there is still no clear definition of the bodily injury although a European Disability Rating Scale was proposed as early as 2003 and was the first step towards harmonizing the compensation of the non-economic posttraumatic injury in EU countries [15].

This proposed disability scale quantifies disability in percentages, establishing “the degree of difficulty in carrying out ordinary movements and actions of daily non-work life, measured against a theoretical maximum of 100%”.

In the case of multiple impairments, the global rate is not automatically derived from the sum of the isolated physical impairment rates and the calculation of global disability differs according to whether the impairments participate in the same function (synergistic impairments) or, on the contrary, are not synergistic.

There are many statistical or indicative medical scales in EU countries, however they are different scales for disabilities occurring in different circumstances: work accidents, road accidents, occupational diseases, etc. which shows us that in order to have a correct scale in the case of road accidents it must be adapted both to the particularities of road trauma and to the provisions of civil legislation in Romania.

**Medical Expertise of Work Capacity [16]**

In this medical specialty the main concepts used are:

Functional impairment is the consequence of morphological or functional disorders and is quantifiable by standardized clinical and functional assessments. It correlates with the degree of disability.

Adaptive incapacity is generated by various morphological and functional disorders and expresses the limitations of the person in the effort to adjust to the natural and social environment. It is expressed as a percentage within a quantified system of normal adaptive capacity. Adaptive incapacity correlates with functional impairment. Adaptive incapacities do not add up.

Capacity of self-care involves: acquiring necessities, preparing food, performing household chores, household tasks, caring for household items; washing, caring for body parts, toileting, dressing, eating, drinking, caring for health.

Work capacity is defined by the possibility of carrying out an organized activity by which the person supports him/herself and the family. Work capacity is expressed as a ratio between the individual's biological possibilities (medically assessed) and occupational demand (as a medico-social element). It is determined by physical and intellectual abilities, which are genetically determined, and by the level of socio-occupational integration, which is related to training and experience.

Invalidity is a medico-legal concept that expresses a person's particular status. The invalidity is quantified in relation to the possibility of carrying out activities related to work and/or daily life according to the degree of loss of working capacity:

- invalidity of the first degree, characterized by the loss of at least half of the capacity to work, this status being compatible with the performance of a professional activity with reduced working hours and under appropriate conditions of demand.
- invalidity of the second degree, characterized by total loss of working capacity, but with preservation of self-serving capacity;
- invalidity of the third degree, characterized by total loss of capacity for work as well as capacity for
self-care, requiring permanent assistance from another person.

In conclusion, the management of medico-legal activities including the required findings and expertise at all stages of the criminal and civil process is a highly complex and highly responsible activity with major implications in determining the severity of the physical and psychological prejudice.

The medico-legal criteria used for the criminal classification of the act, namely: days of medical care, disability, serious and permanent aesthetic damage and the endangerment of the victim life, cannot cover all the modern requirements for the assessment of the bodily injury in road accidents.

The issue of causation of traumatic injuries, including complications and their causal links to road trauma contains a profound medical forensic component and therefore we consider that it cannot be outsourced to other medical specialties.

The medical assessment of the bodily injury in civil law requires very good knowledge of the forensic aspects of mechanical traumatology, which must however be correlated and adjusted to the specific notions of the field of expert assessment of work capacity.

The role of medico-legal expertise in the assessment of the bodily injury is that of multidisciplinary synthesis of injuries diagnosed and treated by doctors from several specialties. The use of different medico-legal standards for each judicial field or in out-of-court settlements will lead to a lack of consistency in the fair compensation of road accident victims.

Conflict of interest
The authors declare that they have no conflict of interest.

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