

**Fundaments of the medical-forensic expertise.**  
**Medical qualification of bodily injuries.**  
**Immaterial damage - moral property**  
**(right to compensation for the violation of personal rights**  
**in the cases of patients injured in traffic accident).**



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## 1. Introduction

Trauma i.e. injury is not the same as an accident, because the former is defined and it has a specific risk of occurrence which means that it can be prevented, unlike the accident (flood, earthquake, fire) which is unexpected, accidental and surprising.

**Trauma** is a violent damage of the tissue, organ, one or more systems of the human body, under the influence of external force. In the cases of trauma, the kinetic energy causes damage to the part of the body which absorbs the energy.

Trauma can be isolated when one organ or tissue is injured and damaged. Multiple trauma refers to several injuries of the same or different systems which does not affect the vital functions, and, in principle, it does not endanger the life of the wounded. Politrauma represents brutal and violent damaging of the body, complex of severe anatomical and functional impairments of two or more organs, or different systems, with direct repercussions on the vital functions of the organism. It results with high mortality. The medical science dealing with the treatment and care of these injuries is called trauma, and the doctor who treats and heals the wounded is a surgeon – traumatologist.<sup>1</sup>

The trauma does not refer only to the local tissue damage, but it mobilises the entire organism. The activation of the multiple mechanisms, such as neural, vegetative, endocrine and metabolic occurs as a response to the trauma. Primarily, many impulses are sent from the place of injury to the brain, which is the centre for pain, awareness, the centre responsible for cardiac action to pituitary gland, and thereof to other glands, such as the adrenal gland. The contraction of blood vessels in place of their disruption occurs, coagulation factors are activated and there are other defence reactions, as well.<sup>2</sup>

According to the type of fracture, the trauma can be simple, easy dispersion of bone tissue without dislocation of fracture fragments, or fracture with various dislocations (latin: ad-latus, ad-longitudinem, cum contractionem, cum axim, etc). The force itself, as well as the bone which is broken may cause a local damage of the surrounding tissues, blood vessels, neural structures, ligaments. These may threaten the vitality of the extremity. The healing of the fracture is an original process that leads to reconstruction of the impaired tissue. At the place of fracture, a local bleeding occurs. Later, first fibrous callus (**Reactive Phase**), as well as solid bone callus (**Reparative Phase**) may be formed. Immediately after the injury, the proliferation of cells occurs. The last phase is the remodelling of the existing callus, which is most active 8-12 months after the injury (**Remodelling Phase**).<sup>3</sup>

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<sup>1</sup> Ruedi, T, Murphy, WM, *AO Principles of Fracture Management*, Thieme, Stuttgart, New York, 2001(79-82); Browner, BD, Jupiter, JB, Levine, AM, Trafton, PG, *Skeletal trauma*. 4th edition, Elsevier Science - Saunders, Philadelphia, 2008, pp. 120-132.

<sup>2</sup> Browner, BD, Jupiter, JB, Levine, AM, Trafton, PG, *Skeletal trauma*. 4th edition, Elsevier Science - Saunders, Philadelphia, 2008, pp. 133-146.

<sup>3</sup> Ruedi, T, Murphy, WM, *AO Principles of Fracture Management*, Thieme, Stuttgart, New York, 2001 (9-17); Lerner, A, Reis, D, Soudry, M, [Severe](#)

When the patient suffers injuries of his moral property (pain, fear, ugliness and reduced activities of daily living - ADLs ) and these are not measurable through the employment of special medical equipment - their evaluation and estimation can be objectified by a doctor who deals with these cases in his everyday practice - the traumatologist. Nobody besides the traumatologist can evaluate these relevant facts in front of the court.

### **1.1 EXPERTISIS MEDICIS - medical expertise, medical finding and opinion, medical forensics**

It represents the employment of the medical knowledge and experience that is made available to the legal science with one purpose: providing the court or another legal entity (law office, insurance company) with the required knowledge, primarily in order to clarify the legally relevant facts. The medical expertise is an interdisciplinary medical procedure which permits the transfer of the medical terms and institutes into legally assigned institutes and categories. The expert opinion is implemented when the judicial process needs to determine the facts that do not belong within the domain of the legal science.<sup>4</sup>

The expertise can be used during the investigation, in the criminal or civil court proceedings, but also during a procedure that is not judicial. The expert opinion consists of the FINDING i.e. revealing legally relevant facts which require special professional knowledge. The findings of the medical expert are based on a review of the entire medical documentation, but also on the examination of the injured. The finding is based on true facts that are objectively determined and it must be exact, clear and complete. On the basis of the facts specified in the finding, the medical expert brings his OPINION or conclusion. This is the most important part of the expertise and it is a result of the medical expert's knowledge and experience. The opinion must be comprehensive, complete and concrete. It should not leave space for different interpretations, indecisiveness or registered deficiencies.<sup>5</sup>

It is interesting to note that in the cases of criminal law, it is important to determine the level of impaired health i.e. violated physical and mental integrity, while during the civil litigation it is the damaging consequence of received injuries that needs to be determined. The latter forms the basis of the immaterial damage (violation of the personal rights of the victim). For more simple explanation, the example of the UGLINESS is sufficient. Namely, according to the Criminal Law, if the applicant has an amputation

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[\*Injuries to the Limbs: Staged Treatment\*](#), Springer, Berlin, New York, 2007 pp. 5-11.

<sup>4</sup> Gnjjidic, Z, Bilic, R, Uvod u medicinsko vjestacenje u gradanskim parnicama, Medicinska naklada, Zagreb, 2008, pp. 195-197.

<sup>5</sup> Zecevic, D, *Sudska medicina*, Jumena, Zagreb, 1989, pp. 18-21; Milovanovic, M, *Sudska medicina*, Medicinska knjiga, Beograd, Zagreb, 1994.

under the knee, it is only one element<sup>6</sup> i.e. a grave bodily harm (U.S.A.: serious bodily injury), representing a severe and permanent health damage. However, according to the Law on Obligations (further on: LO), the bodily injury itself, or the presence of ugliness does not necessarily imply a right to compensation of the damage, but it is rather a permanent damage consequence, interpreted as mental or psychological suffering.<sup>7</sup> *This means that the finding in both cases is the same, but the opinion is different, depending on the type of the case.*

**1.2 EXPERTUS MEDICOFORENSIS** - an expert/a doctor who possesses the required level of specialised knowledge and who has an experience to respond to the requirements needed to clarify the legally relevant facts. The assignment of the medical expert does not direct the court to uncover the truth, but it is his appropriate expert opinion which enriches the knowledge of the court. The court is not authorized to replace the opinion of the medical expert by its own, but it takes a position on the basis of that opinion. For these reasons, the medical-forensic expert should be above all professional, objective and inclined to work only in the interest of truth, without taking of any side in the dispute (the court, the damaged, the prosecutor, the sued). So, the medical expert should possess three fundamental elements united in his person - expertise, professionalism and ethics.<sup>8</sup>

There are four fundamental conditions that any expert should fulfil:

1. Legal ability
2. Professional ability
3. Medical ability
4. Moral ability

**Legal ability.** The person who performs the role of a medical-forensic expert, must, first of all, fulfil the defined legal criteria. The legal ability is determined in the negative sense i.e. in the form of legal limitation for performing the expertise.

For example, the expert may not be in close or distant family relations with neither the prosecutor, nor with the sued. He can also be disqualified if hostility is proven with one of the disputing sides. Equally, any person who is not eligible as a witness may not be engaged as an expert.

If the expert has participated in the treatment of the injured, he can be engaged to prepare the expertise, as under certain

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<sup>6</sup> Кривичен законик (Criminal Code) Official Gazette of the Republic of Macedonia, No. 37/96; 43/03; 73/06; 139/08; 114/09 and 51/11.

<sup>7</sup> Закон за облигационите односи (Law on Obligations), Official Gazette of the Republic of Macedonia. No. 18/01; 4/02; 5/03; 81/09 and 161/09; Закон за изменување и дополнување на законот за облигационите односи (Amendment on the Law on Obligations), Official Gazette of the Republic of Macedonia. No. 84/08.

<sup>8</sup> See: Crnic, I, *Naknada nematerijalne stete - neka pitanja*, Opatija, 2002.

circumstances he is best positioned to clarify the actual situation. But in cases when the patient has died and the doctor who treated him is called to court, he should either exclude himself, or the court should exclude him. Even more so, if there is a reasonable suspicion concerning a medical mistake, or concerning an oversight in treatment.<sup>9</sup>

**Professional ability.** What is important here is that doctor assigned as expert needs to be sufficiently professional and qualified for the particular medical expertise. In the last decade, during many trials in U.S.A, the courts frequently asks questions about the sufficient qualifications of the medical expert, as well as whether he has experience and knowledge in the needed medical field. Whether his opinion can be confirmed with reliable information gained through his practice or scientific achievements? Whether the expert actively works in the relevant field to which the subject expertise refers? It follows from this that the medical expert must have a formal education in the desired field of expertise. Also, in the cases of traffic traumatism in the Republic of Macedonia, the primary and higher courts frequently rely on qualified traumatologists, leaving the old practice to rely on the accounts of the neuropsychiatrists (except in certain cases).

The standing court expert should constantly upgrade his theoretical knowledge through continuing medical education, through symposiums and congresses, new professional literature etc. He should also constantly prove his knowledge through a daily practice with patients.<sup>10</sup>

**Medical ability.** The legislator has envisaged that the expert must be physically and mentally healthy i.e. capable to fulfil this responsibility. Therefore, it is necessary for him to provide a medical certificate.<sup>11</sup>

**Moral ability.** The medical expert must have some moral qualities. He is absolutely ineligible if there is a requirement concerning his moral disqualification i.e. if he is under suspicion or in cases when it has been proven that he has committed a criminal act.<sup>12</sup>

**The court is not bound by the finding and the opinion of the medical expert, mainly because the expertise is only one element of the evidence (instrumentarium) evaluated by the court which decides on the basis of all decisive circumstances.**

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<sup>9</sup> See: Popovic, V, Stojanovic, J, Mujovic-Zornic, H, *Kodeks etike sudskomedicinskih vestaka*, Medicinski fakultet, Nis, 2009.

<sup>10</sup> See: Popovic, V, Stojanovic, J, Mujovic-Zornic, H, *Kodeks etike sudskomedicinskih vestaka*, Medicinski fakultet, Nis, 2009.

<sup>11</sup> More in: Popovic, V, Stojanovic, J, Mujovic-Zornic, H, *Kodeks etike sudskomedicinskih vestaka*, Medicinski fakultet, Nis, 2009.

<sup>12</sup> See: Popovic, V, Stojanovic, J, Mujovic-Zornic, H, *Kodeks etike sudskomedicinskih vestaka*, Medicinski fakultet, Nis, 2009.

**1.2.1 The request for expertise** is, according to the law, provided by the authority responsible for the procedure in written form, to the appropriate expert, who is obliged to prepare the expertise within a certain period of time. For that purpose, the expert is obliged to medical confidentiality with regard to all information that he has found during the investigation or examination. If he is already obliged as an expert by a medical or professional secret concerning the same case, the authority or institution where he is employed should release him from the same, but only for that particular case.<sup>13</sup>

When the medical expert is not sure with regard to some facts, or he has no sufficient knowledge, it is necessary to ask the court to engage another expert who has sufficient knowledge and experience concerning the specific matter. However, in practice, the experts sometimes do answer questions for which they are not competent, fearing that otherwise they would be labelled as “someone who does not know”. Nevertheless, if the medical expert indicates that a particular case should be transferred to another kind of a medic, the court should especially appreciate and respect his demand.

### 1.3 MEDICAL QUALIFICATION OF BODILY INJURIES

First, in determining the type and character of bodily injury, it is necessary to decide on the following issues:<sup>14</sup>

**1. Is it a case of a bodily injury?**

2. Once it has been established that the bodily injury exists, it is necessary to determine if there is a **causal-consequential connection** and whether the actual injury occurred as a result of the action (traffic accident, physical attack, etc).

3. Further on, **the type of injury (classification)** needs to be determined by the medical expert (contusion, wound, fracture). This means deciding whether it is a case of:

a) Mechanical injury: i.e. injury caused by mechanical force, for example when a car crashes into another car, or a car into pedestrian, or whether it was a static or a dynamic pedestrian position. This element is sometimes extremely important, as some injuries may occur only in cases of the movement of the subject, while some other types of injury happen solely in a static position, and reverse.

b) Physical injury: thermal, high-temperature, steam, hot water, liquid, resulting with burns, or extremely low temperatures resulting with

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<sup>13</sup> Кривичен законик (Criminal Code) Official Gazette of the Republic of Macedonia, No. 37/96; 43/03; 73/06; 139/08; 114/09 and 51/11; Закон за облигационите односи (Law on Obligations), Official Gazette of the Republic of Macedonia, No. 18/01; 4/02; 5/03; 81/09 and 161/09; Закон за изменување и дополнување на законот за облигационите односи (Amendment on the Law on Obligations), Official Gazette of the Republic of Macedonia, No. 84/08; Закон за вештечење (Law on Expert evidence), Official Gazette of the Republic of Macedonia, No. 115/2010.

<sup>14</sup> More in: Zecevic, D, *Sudska medicina*, Jumena, Zagreb, 1989, pp. 201-204; Savic, S, *Osnovi sudskomedicinsko vestacenja*, Institut za sudska medicina Medicinskog fakulteta, Beograd, 2010.

frostbite. This includes injuries by electricity (electrocutio), electric shock, lightning stroke or ionizing radiation.

c) Asphyxiation injuries: sufocatio - suffocation with airway obstruction, closing the nose and mouth violently, with hands or with an object or drowning in water (sweet or salty) and strangulatio - in hanging or violent strangulation with hands on the neck of the victim.

d) Chemical injuries: can either be local, for example, due to spilling part of the body with acid or base, or general, by inhalation carbon monoxide, methane or some nerve poison. Also they may result from an ingestion of acid, arsenic, lead, alcohol or opiates.

e) Nutritional: starvation, either with food or water, especially in cases of vulnerable categories as infants or the elderly.

#### **4. Evaluation of severity of injury (qualification) Determining the severity of the injury – both on the level of the local tissue damage and of the entire organism.**

It should be noted that according to the LO, the medical qualification of the injury is performed by the doctor and the legislator decides between the following two qualifications:

##### **I. Bodily harm (U.S.A: bodily injury)<sup>15</sup>**

The Crown Prosecution Service states that “bodily harm has its ordinary meaning such hurt does not need to be permanent, but it must be more than transient and trifling”. Examples of injuries that would be considered ABH (Actual bodily harm) include:

- Loss or breaking of teeth
- Temporary loss of sensory function, including loss of consciousness
- Extensive or multiple bruising
- Non-displaced broken nose
- Minor fractures of bones (as phalanges)
- Minor cuts requiring medical treatment.

Causing any of these injuries would constitute the “actus reus” (latin expression referring to “guilty act”) of ABH. Grazes, minor bruising, swelling, superficial cuts or a black eye would probably be regarded as common assault.

**II. Grievous bodily harm (U.S.A: serious bodily injury)<sup>16</sup>** also known as GBH is a phrase used in the English criminal law which was introduced in s18 and 20 Offences Against The Person Act 1861.

S18 (as amended) reads:

<sup>15</sup> Кривичен законик (Criminal Code) Official Gazette of the Republic of Macedonia, No. 37/96; 43/03; 73/06; 139/08; 114/09 and 51/11; Savic, S, *Osnovi sudskomedicinsko vestacenja*. Institut za sudska medicina Medicinskog fakulteta, Beograd, 2010.

<sup>16</sup> Кривичен законик (Criminal Code) Official Gazette of the Republic of Macedonia, No. 37/96; 43/03; 73/06; 139/08; 114/09 and 51/11; Закон за вештачење (Law on Expert evidence), Official Gazette of the Republic of Macedonia, No. 115/2010.

“Whosoever shall unlawfully and maliciously by any means whatsoever wound or cause any grievous bodily harm to any person, with intent to do some grievous bodily harm to any person, or with intent to resist or prevent the lawful apprehension or detainer of person, shall be guilty of an offence and, being convicted thereof, shall be liable to imprisonment for life.”

S20 (as amended) reads:

“Whosoever shall unlawfully and maliciously wound or inflict any grievous bodily harm upon any other person, either with or without any weapon or instrument, shall be guilty of an offence and, being convicted therefore, shall be liable to a term of imprisonment not exceeding five years.”

The distinction between these two sections is the requirement of specific intent in the cases of S18. For this reason, the offence under S18 is frequently referred to as “GBH with intent” or “wounding with intent”. See the concept of intention in the English law for a further discussion of the modern test to determine whether any particular consequence is intended.

GBH can result with a mortal ending.

In practice, it is often found that “intermediate bodily injury” as such is not a real qualification of an injury and that the court should dismiss it. The injury is qualified by the doctor, until the court qualifies the act. The medical expert should qualify and provide a summary of all of the injuries, instead of qualifying each injury separately, if there are several.

Qualification of bodily injury should not be understood axiomatically - numerically - it should not result from a total sum of all injuries. The act should not be qualified by the number of injuries (for example, very mild injuries summarized to make one severe). Neither the expertise which determines the qualification of an injury should be understood apodictically - once and for all. Namely, in medicine, there are conditions that were initially qualified as bodily harm (U.S.A.: bodily injury), but later, the same have progressed into a grievous bodily harm (U.S.A.: severe bodily injury). Examples of this kind are frequent in practice. For example, abdomen contusion leads to rupture of the spleen, or a simple contusion of the head may cause later bleeding in the brain i.e. severe bodily injuries.

#### 1.4. Principle of qualification of bodily injuries

During the medical qualification of injuries, the experts should consider the legal regulation which reads as follows: **“What kind of effect has been produced by the established injuries in this particular case and what kind of effects it could produce”**. The essence of this principle is the possibility of changes and the progress of the injury.<sup>17</sup>

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<sup>17</sup> Gnjidic, Z, Bilic, R, Uvod u medicinsko vjestacenje u gradanskim parnicama, Medicinska naklada, Zagreb, 2008, pp. 65-67.



In that sense, while determining the characteristics of the concrete injury, it is necessary to take into consideration the following issues:

**Personal characteristics** - The children and the elderly population fall into a special age category, where a lower quantum of force than usual is sufficient to produce a certain injury. Also, the gender can affect the course and the outcome of an injury, as it is known that the females are tenderer and less refractory on external agents (listed above). Also, for example, a bodily injury has been acquired as a result of being hit with a slap. In this case, the victim died because he had congenital brain aneurysm (enlargement of a part of vessel). The expert should clarify and explain to the court all particularities of this case, as the slap is a bodily injury (ABH) and it can not qualify as fatal injury.<sup>18</sup>

**Special Conditions** - the course and the outcome of the injury may also be affected by some specific conditions as menstruation, pregnancy or certain pathological conditions, such as longer periods, pathological fractures (low energy fractures). The expert should provide an explanation of all of these elements.

Another principle in the medical qualification of injuries is differentiating clearly, undeniably and explicitly with regard to each specific injury, both the CONSEQUENCE (something that is necessarily contained in the character on the injury), as well as the COMPLICATION (not necessarily contained in the character on the injury).<sup>19</sup>

Example: **The consequence    Complication**

*Skin wound*    bleeding wound    infection

*Contusion of brain*    glioma    scar    brain abscess (purulent bag)

*Fracture of tibia*    calus    osteomyelitis (inflammation on bone)

### **1.5. Criteria for determining bodily injury<sup>20</sup>**

In the provisions of the CPC, the legislator provides only the criteria referring to the grievous bodily harm, while bodily harm (ABH) is determined by elimination.

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<sup>18</sup> More in: Savic, S, *Osnovi sudskomedicinsko vestacenja*, Institut za sudska medicina Medicinskog fakulteta, Beograd, 2010.

<sup>19</sup> Savic, S, *Osnovi sudskomedicinsko vestacenja*, Institut za sudska medicina Medicinskog fakulteta, Beograd, 2010.

<sup>20</sup> Browner, BD, Jupiter, JB, Levine, AM, Trafton, PG, *Skeletal trauma*, 4th edition, Elsevier Science - Saunders, Philadelphia, 2008, pp. 661-669; Savic, S, *Osnovi sudskomedicinsko vestacenja*, Institut za sudska medicina Medicinskog fakulteta, Beograd, 2010; Gnjidic, Z, Bilic, R, Uvod u medicinsko vjestacenje u gradanskim parnicama, Medicinska naklada, Zagreb, 2008, pp. 67-69.

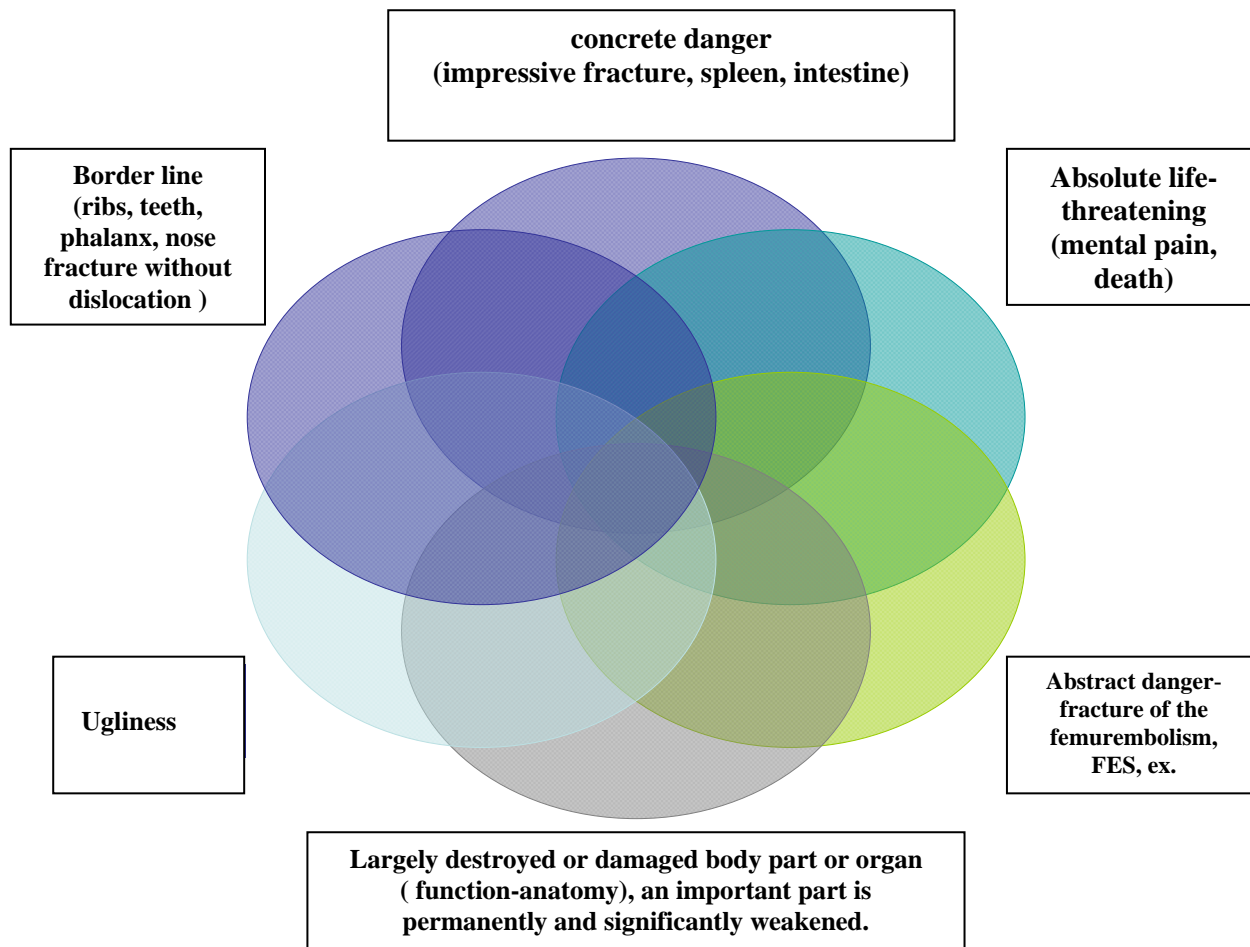
**Concrete danger** is the case when a particular injury could cause a fatal outcome, but this outcome did not occur, due to the performing of an operative intervention. In this way, the surgery itself does not retrain the injury in bodily harm (ABH). For example, stabbing with a knife resulted with a wound of 2 cm in the skin, but it led to perforation of the colon or spleen. Equally, the duration of the danger of the life of the wounded is not important. Another example may be a simple contusion of the head of the damaged which led to subdural or epidural hematoma (bleeding) in the brain, where due to the performed operative intervention, the injured was saved from certain death.

**Absolute danger** exists when a particular injury has caused mortal outcome of the injured, because of the enormous destruction, destruction of the head (beheadings), opening the chest, heart or rupture of large blood vessels, etc.

**Abstract danger** occurs when the particular injury of the victim has developed a complication. For example, after the fracture of the femoral bone, fat embolism syndrome develops producing a rapid death of the victim, or leading to the development of a purulent process of the bone. The expert should know that it is not a result of the injury, but complications occurred. He should report the same to the court, providing detailed explanation. The medical-forensic expert should pay particular attention during the qualification of the injury, in order to decide how much is destroyed, is the damaged tissue part of the body or organ (function-anatomy), as well as if the important part is permanent and significantly weakened.

Ugliness is one of the elements for qualification as a grievous bodily harm, especially in cases of mutilation of the body (amputated upper or lower extremity), local defects of skin, subcutaneous, muscle or presence of abrasive scars that have a scar-deformity character and cause the disgust of the environment.

**Inability to work.** Although it does not represent a medical qualification of the injury, it should be considered in the following context: if it is ABSOLUTE, it represents an inability to do any work (for example, amputation of the little finger of a violin player). PROFESSIONAL is not absolute. Thus, for example, the violin player can teach music theory or something else. This is not so much a problem in the field of criminal law, as it is in the cases of civil law (compensation for violation of personal rights from LO).



## **2.0 FUNDAMENTALS OF IMMATERIAL DAMAGE.**

### **MORAL PROPERTY, RIGHT TO COMPENSATION FOR VIOLATION OF PERSONAL RIGHTS OF THE DAMAGED WHO HAS BEEN INJURED IN TRAFFIC ACCIDENT**

The term immaterial damage refers to a damage resulting from harmful activities affecting the physical and psychological balance of the injured. The legal term of immaterial damage is common for all legal systems of the civilized countries and it is designed to protect the human life and health. This right has found place in the Resolution of the Council of Europe, as well as in the Constitutions of numerous countries. In Republic of Macedonia, the immaterial damage is a legal term regulated by the Law on amendments of Law on Obligations of 2008 (hereinafter LO of 2008) and it is defined as a violation of the personal rights of the injured. In case where it is appropriate, a monetary compensation is assigned (Article 189 of LO).<sup>21</sup>

<sup>21</sup> Закон за облигационите односи (Law on Obligations), Official Gazette of the Republic of Macedonia. No. 18/01; 4/02; 5/03; 81/09 and 161/09;

The legal term refers only to damage caused by **violation of legally recognized interests**.

Apart from it, the term **"insurable damage"** recognizes damages that are legally irrelevant, such as natural disasters (flood, storm, earthquake, physical assault), damages that occurred "for themselves" and damages which are consequences of the insurance case. An integral part of this damage is the policy and TABLE for determining the percentage of permanent disability, as a result of an accident. According to this table, the disability is an insurance term meaning a loss or a reduction of the anatomy or function of some body part, but solely as a consequence of the insurance case (strictly specified cases, or those which are not excluded).

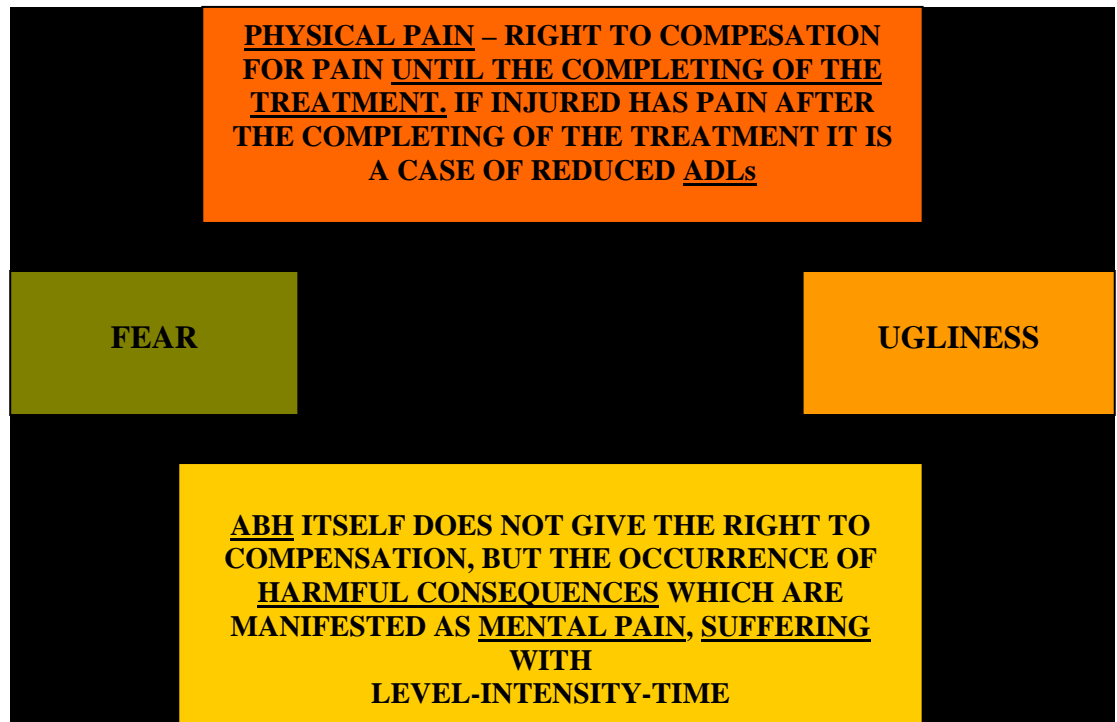
In the civil procedure, the medical expertise is very popular and frequent nowadays. During the conducting of a medical expertise in the procedure for determining immaterial damage, the role of the medical expert is huge, but at the same time, he has a great responsibility to produce a correct reasoning. The following questions are of particular practical interest for the court, as well as for the other sides to the dispute (prosecutor, sued).<sup>22</sup>

1. Whether the injured is speaking the truth about the injury and about the harmful consequences of it? Whether there is a causal – consequential connection between the accident and the injury?
2. Has the treatment been finalised?
3. Are there new, modern methods of treatment or operational interventions that would reduce the harmful effects of the injury?
4. Whether the injured voluntarily discontinues the treatment, or he refuses an operative intervention, thus increasing his own chances to suffer certain consequences?
5. Whether the injured wore a seat belt?
6. How to objectify and quantify the extent of permanent consequences resulting from the injury?

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Закон за изменување и дополнување на законот за облигационите односи (Amendment on the Law on Obligations), Official Gazette of the Republic of Macedonia. No. 84/08.

<sup>22</sup> Gnjidic, Z, Bilic, R, Uvod u medicinsko vjestacenje u gradanskim parnicama, Medicinska naklada, Zagreb, 2008 (22-28); Crnic, I, Grbin, I, Curkovic, M, Jelcic, O, Momcinovic, H, *Naknada nematerijalne stete po zakonu o obaveznim odnosima. Pravni i medicinski aspekt.*, Organizator, Zagreb, 2003, pp.123-125.



In the judicial practice and in the longstanding practice of the medical expert, there are many other questions and answers that could not be listed here. Although not so frequently as before, the following question is still present today: whether the medical science is "competent" to answer to the challenges of the judicial system? Is it possible to objectify the permanent consequences of the injury? The answer is certainly affirmative. In the era of an expansion of the medical science which penetrates deeply into the physiological processes at the cellular level and the breakthrough into the human genetic material, it is unacceptable that we can not determine the type and nature of the injuries and their possible harmful consequences. Only through an interdisciplinary approach, permitting the courts to enrich their medical knowledge and the reverse enrichment of the medical expert with inexhaustible legal science that defines this matter, progress is ensured. So, nowadays, there is an active approach versus the previous passive approach. Performing of a quality medical-forensic (traumatological) expertise can respond to the challenges of the modern judiciary.<sup>23</sup>

## **2.1. Moral property (immaterial damage, damage compensation, violation of personal rights)**

One of the fundamental values of the modern civilization is the respect for the dignity of the human being. Unless it has been

<sup>23</sup> Gnjjidic, Z, Bilic, R, Uvod u medicinsko vjestacenje u gradanskim parnicama, Medicinska naklada, Zagreb, 2008, pp.39-42; Crnic, I, Grbin, I, Curkovic, M, Jelcic, O, Momcinovic, H, *Naknada nematerijalne stete po zakonu o obavezanim odnosima. Pravni i medicinski aspekti*, Organizator, Zagreb, 2003, pp. 123-127; Stankovic, O, *Naknada Stete*, Nomos, Beograd, 1998, pp. 23-29.

followed by a legal "protection", it would remain just a phrase without an actual support in real life. According to one of the principles of civil law: "Anyone who would cause harm to another is under obligation to compensate ..." So, we arrive to the so-called institute of compensation, a legal institute which permits establishing a responsibility for the damage (who is to blame?). On the other side, rules are developed in order to correct the damage (the procedure for compensation).<sup>24</sup>

**A bodily injury is not sufficient for establishing an existence of damage** i.e. solely the violation of someone's legally protected good (for example: shoulder contusion, concussion, amputation of the thumb of the foot), **but it is necessary that the violation has caused certain harmful consequences, such as physical pain, mental pain (because of ugliness or reduced ADLs) or fear.**

If there are no consequences, then the law does not provide for the right to compensation, besides the existence of severe physical violation. This category includes the mental suffering because of the death of a close person and the existence of a particularly severe disability.

It is a rather abstract field, having in mind that the monetary compensation is not an equivalent of the damage, but it is an equivalent of the relief of the harmful effects which have occurred. However, each physical violation does not automatically imply the unconditional right to the payment of monetary compensation, as in the cases when the violation of personal rights is minimal, there is only immaterial damage and not the right of compensation.

Under the new LO of 2008 (Article 186) **physical pain, mental pain and fear, the existence of ugliness, reduced activities of daily living (ADLs)** are no longer compound elements of the immaterial damage or an independent legal foundation, but **measures (qualification circumstances) that justify or do not justify the severity of the violation of the personal rights of the injured.**

### 2.1.1 PHYSICAL PAIN

As a result of the injury (traffic accident, physical assault, etc.) the damaged acquires certain bodily injury. It causes a **physical pain** of a different kind and level and in different periods, depending on the type of injury.<sup>25</sup>

<sup>24</sup> Gnjidic, Z, Bilic, R, Uvod u medicinsko vjestacenje u gradanskim parnicama, Medicinska naklada, Zagreb, 2008, pp.37-39; Crnic, I, Grbin, I, Curkovic, M, Jelcic, O, Momcinovic, H, *Naknada nematerijalne stete po zakonu o obaveznim odnosima. Pravni i medicinski aspekti*, Organizator, Zagreb, 2003, pp. 25-30; Byard, R, Corey, T, Henderson, C, Payne-James, J, *Encyclopedia of Forensic and Legal Medicine*, Elsevier Academic Press, 2005; Stankovic, O, *Naknada Stete*, Nomos, Beograd, 1998, pp. 23-25; Камилоски, В, *Судско-медицински вештачења на телесните повреди*, Архива на Основен Суд Скопје 2, Скопје, 2000-2010.

<sup>25</sup> Gnjidic, Z, Bilic, R, Uvod u medicinsko vjestacenje u gradanskim parnicama, Medicinska naklada, Zagreb, 2008, pp. 53-60; Crnic, I, Grbin, I,

Pain is an unpleasant feeling of the individual, associated with tissue damage that disrupts the health (WHO).

The pain is useful for the patient, as it localises and immobilizes the injured part and it plays a role of a useful symptom for the doctor who continues with certain medical clinical and para-clinical examinations. So, the pain is an early protective mechanism. Therefore, in order to develop pain, it is necessary to have a painful stimulus from the place of violation which travels through the peripheral nervous system to the thalamus and is transmitted to the cerebral cortex, where the information is processed. This road is called "path of pain". In certain situations, the pain, such as sadness, grief, loneliness, can be emphasized.

Pain can be divided into: acute (short - in the moment of violation) and chronic (prolonged); by strength, it can be low, medium, strong; continuous-discontinuous in waves; somatic -bones, muscles, connective tissue, fascia, tendons, ligaments; visceral - kidney, intestine, liver, spleen; neural -during shock; phantom pain-after amputations, etc.

The medical expert can not measure the pain, as it is the case with fever. There is no specific measuring instrument that may be generally usable, because, first of all, the pain is individual and it depends on many factors, specific psychological condition of human, cultural, social, intellectual and other differences.

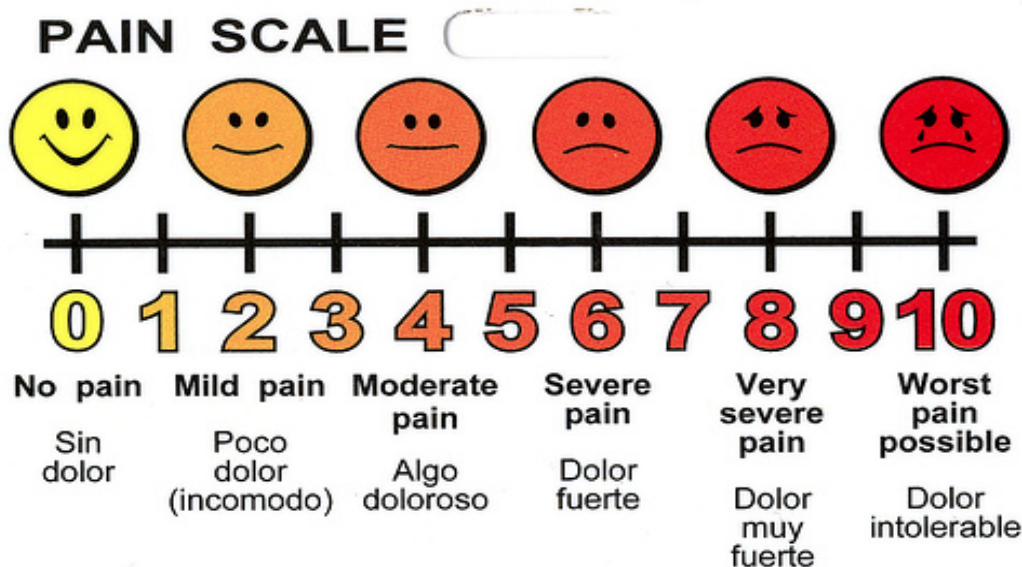
However, there are determined scales (VAS-visual analogue scale, numeric scale, verbal scale) which permit measuring of the pain with a high percentage of success.<sup>26</sup>

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Curkovic, M, Jelcic, O, Momcinovic, H, *Naknada nematerijalne stete po zakonu o obaveznim odnosima. Pravni i medicinski aspekti*, Organizator, Zagreb, 2003, pp. 30-31; Stankovic, O, *Naknada Stete*, Nomos, Beograd, 1998, pp.50-51; Камилоски, В, *Судско-медицински вештачења на телесните повреди*, Архива на Основен Суд Скопје 2, Скопје, 2000-2010; Byard, R, Corey, T, Henderson, C, Payne-James, J, *Encyclopedia of Forensic and Legal Medicine*, Elsevier Academic Press, 2005; Pscheidl, D, *Trends in compensation for non-pecuniary losses in various European countries*, XI World congress, New York, 2002.

<sup>26</sup> Browner, BD, Jupiter, JB, Levine, AM, Trafton, PG, *Seletal trauma*, 4th edition, Elsevier Science - Saunders, Philadelphia, 2008, pp. 670-682.

- Numerical pain scale



- Verbal pain scale

#### Verbal Descriptor Scale

Patient's Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Instructions:** Please place a check mark next to the phrase that best describes the current level of your pain.

- \_\_\_\_\_ The Most Intense Pain Imaginable
- \_\_\_\_\_ Extreme Pain
- \_\_\_\_\_ Severe Pain
- \_\_\_\_\_ Moderate Pain
- \_\_\_\_\_ Mild Pain
- \_\_\_\_\_ Slight Pain
- \_\_\_\_\_ No Pain

As it has already been stated, it is necessary to OBJECTIFY the harmful consequences of the injury, through the employment of particular methods.<sup>27</sup>

The court may also apply these scales at the main hearing, asking for a determination of the intensity of pain from 00-10,

<sup>27</sup> Gnjjidic, Z, Bilic, R, Uvod u medicinsko vjestacenje u gradanskim parnicama, Medicinska naklada, Zagreb, 2008, pp. 57-60; Камилоски, В, Судско-медицински вештачења на телесните повреди, Архива на Основен Суд Скопје 2, Скопје, 2000-2010.



especially when it has been required to assign a monetary compensation. In that case, it is necessary to emphasize the existence of a simulation and aggravation, when the damaged should obtain particular benefit. Therefore, the damaged needs to declare in which period of the day he consumes analgesics, and for how long.

The court should know that beginning from the time of the injury, until the near or distant future, the intensity of pain decreases proportionally. But it is also necessary that the medical expert is familiar with the injury. The best positioned to know this is the traumatologist who treats and heals injuries on daily basis and who is able to estimate best for how long and to what extent would the pain remain, for example, in the cases of the fracture of the elbow or knee, or a cut or contusion of the body (in this way, the expert opinion becomes transparent, instead of being subjective). Otherwise, it would be the same, as it is quantified by an incompetent expert, someone with general knowledge (it is well known that contusion hurts less, and fracture longer), and that would lead to damage to the defendant (if the intensity of pain increases) or to the prosecutor (if the pain reduces).

Each expert should know and inform the court about the fact that the pain lasts until the treatment has been completed. If there are some unpleasant painful sensations, they are transferred into the category of reduced activities of the daily living (ADLs).

According to the legislator, the pain that lasts quite shortly or with low intensity is not a subject of evaluation and it does not entitle a monetary compensation. This should be known by all of those involved in the civil litigation for damage compensation, due to the violation of personal rights of the victim.

### 2.1.2 FEAR

The legal institutions frequently request the opinion of the medical-forensic expert in order to implement a legal procedure intended to clarify the fear of the victim which is a consequence of the harmful event (traffic accident) for which the expertise is needed. The harmful event itself leads the injured to experience **fear** of different intensity, extent and duration.<sup>28</sup>

The fear represents a special form of human affection and there are several definitions for it: psychoanalytic, behaviourist, cognitive, biological, etc.

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<sup>28</sup> Gnjjidic, Z, Bilic, R, Uvod u medicinsko vjestacenje u gradanskim parnicama, Medicinska naklada, Zagreb, 2008, pp. 61-64; Crnic, I, Grbin, I, Curkovic, M, Jelcic, O, Momcinovic, H, *Naknada nematerijalne stete po zakonu o obaveznim odnosima. Pravni i medicinski aspekti*, Organizator, Zagreb, 2003, pp. 42-43; Камилоски, В, *Судско-медицински вештачења на телесните повреди*. Архива на Основен Суд Скопје 2, Скопје, 2000-2010; Byard, R, Corey, T, Henderson, C, Payne-James, J, *Encyclopedia of Forensic and Legal Medicine*, Elsevier Academic Press, 2005; Pscheidl, D, *Trends in compensation for non-pecuniary losses in various European countries*, XI World congress, New York, 2002; Stankovic, O, *Naknada Stete*, Nomos, Beograd, 1998, pp. 180-195.

The modern understanding of fear indicates that the place of its formation is in the limbic system, as well as in the cerebral cortex. For the purposes of medical expertise, it is appropriate to define the fear as a change of an affective condition of the human that occurs when an external or internal event is observed as danger. The same circumstances may cause fear in some individuals, while in others it can be incomparably smaller or does not exist at all. Equally, a very low level of risk may cause a fear of strong intensity in some individuals. The medical expert should take into consideration the structure of the personality and, if there is any pathological deviation, the same should be clarified in front of the court. The differences should be explained and the consequences of the traffic accident should be taken into consideration. Possible consequences involve the panic attacks, PTSD (Post Traumatic Stress Disorder), stress reaction, various phobias, paranoia, etc. The fear is a normal phenomenon and it has some physical characteristics - wide pupils (simpaticus), increased blood pressure, accelerated pulse, tense muscles, increased level of adrenaline and others which actually represent physiological characteristics when the body is preparing for rapid action, escaping or defence. Actually, it represents one of the survival instincts of the human kind.

Fear can be a vital, referring to fear for life, which has powerful intensity, but is normally short-lived. Secondary fear is longer lasting and with different intensity. It is associated with the mechanism of injury, fear from hospital, fear from developing some complications (whether fractures will heal, if any) fear from operations, fear from anesthesia, or fear from crossing the street, driving a car, passing at the place of accident (situational-related content, strong association with the accident). A special phenomenon is so-called Flashback which refers to night fears and nightmares associated with the dreaming of the accident.<sup>29</sup>

Duration of fear (secondary) is usually limited to the period of treatment and recovery from physical injury or its consequences, while its intensity is assessed in proportion to the degree of the physical damage which has occurred.

The amendments of the LO of 2008 defined the term immaterial damage as 'violation of personal rights'. Medical-forensic expert should know that the evaluation of the duration and intensity of fear represent only one of the qualifying circumstances which is used only for the evaluation of severity of violation of the victim's personal rights.

### **Post-traumatic stress disorder**

This disorder occurs as a delayed or prolonged response to a stressful event or situation. Predisposing factors such as personal characteristics or previous history of neurotic illness can easily lead to the development of the syndrome. Typical signs include episodes of reliving the trauma in re-imposed memories (flashback), in dreams or

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<sup>29</sup> Камилоски, В, *Судско-медицински вештачења на телесните повреди*, Архива на Основен Суд Скопје 2, Скопје, 2000-2010.

in nightmares, indifference to the environment, avoiding activities resembling the trauma, etc. Anxiety and depression are often associated the above mentioned symptoms and signs. These conditions begin after the trauma, with a period of latency that can extend from several weeks to several months. Recovery is expected in most cases.<sup>30</sup>

### 2.1.3. UGLINESS

Esthetical deformities of the victim of the traffic accident may cause certain mental suffering and compromise the experiencing of the everyday living.<sup>31</sup>

Ugliness itself is defined as a disturbance of the previous:

- external appearance
- integrity (altered physical completeness, harmony) of the body
- impairment of some bodily function.

According to the legislator, the ugliness does not act as a basis for granting monetary compensation, but it is rather the mental pain or mental suffering resulting from the ugliness. De jure, LO recognises only the term ugliness, but de facto, in the judicial practice, the medical expert is required to quantify the ugliness and for this purpose there is:

1. Minor ugliness - esthetical disruption from light level, cosmetic defect
2. Medium ugliness - or medium level of ugliness
3. Major ugliness - severe, strong ugliness or powerful level of ugliness
4. Extremely large ugliness - the most severe ugliness, mutilation.

Medical-forensic expert (traumatologist) evaluates the emotional response to the ugliness on the basis of his knowledge and experience. During the evaluation, he takes into consideration the esthetical, ethical and cultural traditions of the environment where the victim lives. It is necessary that the surgeon traumatologist or plastic surgeon declares his evaluation of ugliness i.e. its dimension. Ugliness itself as a life condition outside of the perception of usual human

<sup>30</sup> Browner, BD, Jupiter, JB, Levine, AM, Trafton, PG, *Skeletal trauma*, 4th edition, Elsevier Science - Saunders, Philadelphia, 2008, pp. 670-680; Zecevic, D, *Sudska medicina*, Jumeana, Zagreb, 1989 pp. 313.

<sup>31</sup> Gnjidic, Z, Bilic, R, *Uvod u medicinsko vjestacenje u gradanskim parnicama*, Medicinska naklada, Zagreb, 2008, pp. 48-52; Crnic, I, Grbin, I, Curkovic, M, Jelcic, O, Momcinovic, H, *Naknada nematerijalne stete po zakonu o obavezanim odnosima. Pravni i medicinski aspekti*, Organizator, Zagreb, 2003 pp. 32-33; Камилоски, В, *Судско-медицински вештачења на телесните повреди*, Архива на Основен Суд Скопје 2, Скопје, 2000-2010; Byard, R, Corey, T, Henderson, C, Payne-James, J, *Encyclopedia of Forensic and Legal Medicine*, Elsevier Academic Press, 2005; Pscheidl, D, *Trends in compensation for non-pecuniary losses in various European countries*, XI World congress, New York, 2002; Stankovic, O, *Naknada Stete*, Nomos, Beograd, 1998, pp. 180-195.

experience contains a high potential for stress. On the other hand, one should evaluate the individual factors, such as the vulnerability and ability to overcome the problems, depending on the structure of the personality.

During the evaluation of the mental pain, the medical expert should take into consideration:

**A. Objective circumstances**

They are determined by the objective clinical examination, the review of all medical documentation, chest images, measuring the range of motion of the individual, the estimation of the way of walking and its possible deviations (ranging from mild, almost unnoticed to clearly and evident incorrect walking or movement). Here, the possible earlier deformities of the body should be taken into consideration (preferably on the basis of the medical record).

**B. Subjective circumstances**

These are primarily conditions of ugliness where an average person would feel uncomfortably or awkwardly in the environment of the other people. Therefore, the appropriate evaluation is not just a reaction of the environment to the ugliness in the sense of causing pity, disgust, etc, but, above all, it is the subjective feeling of inconvenience and discomfort of the injured. Indeed, this aspect may influence much more the mental balance and the long-term physical condition of the injured person.

Scar - deformity changes of the body, resulting from the injury, can cause certain negative emotional experiences to certain persons, mainly due to the fact that the victim is aware of them i.e. he is aware of the changed esthetical appearance of his body. The existence of ugliness or mutilation of the victim's body parts causes a feeling of insecurity, inferiority complex and self-pity. The psychological reaction of the environment during the exposure of these parts is disgust or aversion. The age itself is an important factor in the entire personality and psyche of the damaged. Equally, the scars are in strong association with the act of the accident and with the consequent operational interventions. On the other hand, the repeated questions from the environment about the nature of the injury produce a constant tension of the damaged. His nervousness and anxiety act as a major source of mental suffering. Therefore, the damaged intentionally avoids undressing in front of other people (defensive psychological reaction) and he isolates himself from the external environment, avoiding social interpersonal relations, primarily due to a low self-esteem and a strong occupation with the scars from received wounds.<sup>32</sup>

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<sup>32</sup> Browner, BD, Jupiter, JB, Levine, AM, Trafton, PG, *Skeletal trauma*, 4th edition, Elsevier Science - Saunders, Philadelphia, 2008 (Ch. 14); Gnjidic, Z, Bilic, R, *Uvod u medicinsko vjestacenje u gradanskim parnicama*, Medicinska naklada, Zagreb, 2008, pp. 50-51; Камилоски, В, *Судско-медицински веештачења на телесните повреди*, Архива на Основен Суд Скопје 2, Скопје, 2000-2010.

There is a discussion in the framework of the procedural law concerning the above mentioned circumstances. A question has been posed whether some plastic operative corrections or prosthetics of certain parts could remove or reduce the level of ugliness. Recent judicial practice permits the application of new surgical techniques allowing correction of ugliness as a qualifying element for the assigned monetary compensation. A particularly capable, professional, ethical and qualified medical-forensic expert (traumatologist) should acknowledge and explain these opportunities to the court.

Therefore, the following can be specified:

1. Concealing ugliness.

It involves all methods of concealment of ugliness, such as an artificial eye, artificial wig, false teeth, artificial dental prosthesis, prosthesis for the amputated arm or leg.

2. Removal or reduction of ugliness.

Due to the development of the medical science and the new plastic reconstructive esthetical operations, ugliness can be reduced or removed. The expert needs to know and to present to the court the following possibilities:

- temporary/reversible ugliness that can be corrected, and
- permanent/irreversible ugliness, which remains either reduced or at the same level, no matter has reconstructive operation been undertaken.

It is interesting to note that, according to Criminal Code<sup>33</sup> and LO, there are two specific differences in the understanding of ugliness. In the criminal procedure, during a criminal evaluation of ugliness, the crucial element is an **objective** opinion of the medical expert and not the personal opinion of the injured about his own appearance, primarily because, according to the Criminal Code, all people are equal with regard to the committed criminal act. Profession, workplace, occupation, social status, gender, age, etc. do not affect the medical qualification of the injury. Apart from this, in the cases of the compensation of immaterial damage, the situation is quite different. Thus, the provisions of LO emphasize the importance of the subjective feeling of uneasiness and inconvenience caused by the injury in front of himself and in front of other people.

The Court is also authorized to evaluate the level of mental pain resulting from the ugliness.

Scars of skin that has been healed completely after the operative intervention should be considered as light esthetical disruption, producing a small cosmetic defect i.e. ugliness. Such are the postoperative scars healed per primam.

Large and irregular scars or scars that have deformed skin, uneven thickness above the level of the skin, hyperpigmented, wound heal per secundam, hypertrophy of scar or rough keloid, scars on easily visible part of the body, face, neck, forearm and post-traumatic hernia of muscle, fistulas, etc. qualify as ugliness of a medium or

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<sup>33</sup> Criminal Code, Official Gazette of the Republic of Macedonia, No. 37/96; 43/03; 73/06; 139/08; 114/09 and 51/11.

severe level, depending on their changes and the mental pain they produce. All of this should be evaluated separately (preferably by the surgeon), as well as individually, in order to determine the extent of mental suffering. In young persons, these changes would certainly be classified as ugliness of severe level. The location is of great importance for the determining of the level of ugliness and its impact on the emotional life of the injured and, therefore, for the determination of the amount of the monetary compensation.<sup>34</sup>

It is necessary to say that covering with wardrobe or masking (hair powder, gloves or trousers) does not diminish the need for monetary compensation.

In the cases of women, the breasts have a special significance during the entire lifespan. It does not apply solely to the physiological life and motherhood (period of breastfeeding), but also to the psychological-emotional life and on the esthetical part (femininity) of each woman's personality. So, the existence of small wounds of the breast, or a small deformity or asymmetry, implies minor ugliness or light esthetical disruption. On the contrary, the existence of partial amputation or deformation would certainly indicate the existence of middle level ugliness, and in cases of traumatic amputation of one or both breast there is severe or extremely severe ugliness i.e. disability.

In cases of upper and lower limb amputation there is extremely severe disability i.e. extremely severe level of ugliness. In cases of paralysis of the fingers of the hand or amputation of certain phalanges (limbs) of fingers there is a medium level of ugliness. Certainly, it is necessary to consider at this point whether it is the dominant hand which has been hurt. If it is a dominant hand, a higher level of ugliness is involved. In case of more serious blocking of the shoulder, the mental pain would be stronger, especially during dressing, showering, or feeding, especially in public places, such as the restaurants.

In cases of bodily injury that affects the lower limbs, it is necessary that the medical expert pays special attention to the way of movement, incorrect walking, inability for running, as well as the use of some orthopaedic devices (pads, prosthesis, etc).

That means that the expert should not only take into consideration the changes of the skin, scars or skin defects, but he should also keep in mind the range of the mobility of certain joints (shoulder, wrist, hip, knee, ankle) causing the sense of inconvenience or uneasiness of the damaged towards themselves and towards the environment.

According to LO, ugliness is no longer a constitutive element of the immaterial damages, nor is it an independent legal foundation. It is a qualified circumstance which serves as an element for the evaluation of the severity of violation of the personal rights of damaged.

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<sup>34</sup> Browner, BD, Jupiter, JB, Levine, AM, Trafton, PG, *Skeletal trauma*, 4th edition, Elsevier Science - Saunders, Philadelphia, 2008 (ch. 14); Lerner, A, Reis, D, Soudry, M, [\*Severe Injuries to the Limbs: Staged Treatment\*](#), Springer, Berlin, New York, 2007, pp. 27-30.

#### 2.1.4 Activities of daily living (ADLs)

According to the LO of 2008, the mental pain resulting from the reduced activities of daily living (ADLs) is no longer a constitutive element of the immaterial damage or an independent legal foundation, but one of the measuring instruments (qualifying circumstance) that justifies or does not justify the severity of violation of the personal rights of the damaged.<sup>35</sup>

Mental pain resulting from reduced ADLs is an abstract term and it is difficult for the doctor to describe. However, the judicial medical expert should be sufficiently competent to make it descriptive i.e. to enumerate the actions that damaged is unable to perform partially or completely, due to the consequences resulting from the injury - **objectivity**. In order to evaluate objectively the elements of reduced ADLs, it is necessary to make some measurements (with arthrometer) of the movements of certain joints. To verify the pathological condition of limitation of the movement of joints, it is first of all necessary to know the normal anatomy, physiology and biokinetics of joints. It can be done most appropriately in front of the court by an expert traumatologist. It is necessary to note that reduced ADLs by itself does not give a right to compensation, but the consequences that he feels in his mental sphere are. The mental pain may be due to the fact that he is unable to work, he has reduced or destroyed ability for progress in his profession or he is unable to do activities in his free time - sports, hobbies, recreation, etc.<sup>36</sup>

The mental pain of the damaged due to reduced ADLs may be permanent, in which case he is assigned a monetary compensation. Also, a monetary compensation may be assigned in cases of temporarily reduced ADLs (due to its strong intensity and long lasting, or if the special circumstances justify it). The medical expert is required to point to the fact that due to the reduced ADLs the damaged will suffer mental pain in the future (near or distant), according to type of injury.

Very frequently, the court requires medical-forensic expert to determine the percentage of the disability of the injury, as part of reduced ADLs. The expert should avoid this and he should indicate his avoidance to the court. Namely, the percentage of disability is, first of all, something completely different that does not correlate with reduced ADLs, and, secondly, if the percentage is, for example, 30%, 50% or 80%, it does not simplify the effort to determine monetary compensation. This compensation is given due to the mental pain and the reduced ADLs, and not because of the disability. Some people (impaired) may have a high level of disability, but it does not reflect

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<sup>35</sup> Gnjdjic, Z, Bilic, R, Uvod u medicinsko vjestacenje u gradanskim parnicama, Medicinska naklada, Zagreb, 2008, pp. 44-47; Crnic, I, Grbin, I, Curkovic, M, Jelcic, O, Momcinovic, H, *Naknada nematerijalne stete po zakonu o obavezanim odnosima, Pravni i medicinski aspekti*, Organizator, Zagreb, 2003, pp. 31-32; Stankovic, O, *Naknada Stete*, Nomos, Beograd, 1998, pp. 247-258; Камилоски, В, *Судско-медицински вештачења на телесните повреди*, Архива на Основен Суд Скопје 2, Скопје, 2000-2010.

<sup>36</sup> [Aitchison Robertson, WG.](#) *Aids to Forensic Medicine and Toxicology*, Bibliobazaar, 2010, pp. 21-22.

on their emotional life i.e. their mental suffering. In special cases of some bodily injuries with consequences, it is allowed to use the tables of the insurance companies to determine the percentage of disability resulting from the accident. It happens especially in the cases when there are differing opinions, or in order to specify some harmful consequence. But it should be determined for each case individually. For example, in the case of an amputation of the thumb of the right hand of surgeon, the percentage of disability can be 60%, as he can not do his job, as well as perform other activities in life outside of work. For a specialist physician radiologist, it would be 30%, because he can continue to work and the other fields of his life would not be obstructed.

In practice, the expert is frequently asked questions concerning the absence from school or loss of the school year among students. The evaluation should be individual and it should take into account the possible existence of mental pain or difficulty performing some activities which have been performed easily before the injury. The lost potential earning should be evaluated in accordance to the material law.

**Example of reduced ADLs with a concussion, wound in the mouth, contusion below the knees.**

**Activities of Daily Living** for the entire period of the injury had been reduced to a high level. For this reason, the injured has invested huge additional efforts to perform the daily activities and to fulfil his physiological needs. There was also a permanent need for the presence of another person besides himself - his parents. During this time, he has been constantly in bed for two weeks, except when he needed to go to the hospital for control. The damaged could not perform the daily activities by himself, which he is normally used to do. He took only liquid food, he could not eat normally because of the wound in his mouth, he has been unable to dress himself and to shower. Due to profound additional efforts, he has attempted to leave the bed, to sit down, unable even to move, he had dizziness and headaches and pain in the area below the left knee (he wore a gypsum immobilization). The damaged had a high degree reduced ADLs during a period of one month, which required meaningful additional efforts. During the following period of five weeks, the damaged invested a medium additional effort in order to perform the everyday activities, especially if a bigger physical effort was needed. During this period, permanent control examinations have been made and analgesics have been prescribed because of the pain he has suffered.<sup>37</sup>

During the following period of two months, the damaged invested lower additional efforts to perform some activities such as hiking, longer walking, running or performance of some sports activities (basketball, soccer).

- ADLs was reduced to a high degree for a period of one month, requiring big additional efforts for the performing of the everyday activities.

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<sup>37</sup> Камилоски, В., *Судско-медицински вештачења на телесните повреди*, Архива на Основен Суд Скопје 2, Скопје, 2000-2010.



- During a period of approximately five weeks, ADLs was reduced to a medium degree, requiring medium additional efforts for the performing of the everyday activities.
- During a period of approximately two months, ADLs was reduced to a low degree, meaning that low additional efforts were required for the performing of the everyday activities.

**The mental suffering or the mental pain that the damaged felt in the above mentioned periods is actually his moral property.**

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**FUNDAMENTS OF THE MEDICAL-FORENSIC EXPERTISE.**  
**MEDICAL QUALIFICATION OF BODILY INJURIES.**  
**IMMATERIAL DAMAGE - MORAL PROPERTY (RIGHT TO**  
**COMPENSATION FOR THE VIOLATION OF PERSONAL**  
**RIGHTS IN THE CASES OF PATIENTS INJURED IN**  
**TRAFFIC ACCIDENT)**  
(Abstract)

Trauma is a violent damage of the tissue, organ, one or more systems of the human body, under the influence of external force. In the cases of trauma, the kinetic energy causes damage to the part of the body which absorbs the energy.

Trauma can be isolated when one organ or tissue is injured and damaged. Multiple trauma refers to several injuries of the same or different systems which does not affect the vital functions. Politrauma represents brutal and violent damaging of the body, complex of severe anatomical and functional impairments of two or more organs or different systems, with direct repercussions on the vital functions of the organism. It results with high mortality. The medical science dealing with the treatment and care of these injuries is called trauma, and the doctor who treats and heals the wounded is a surgeon – traumatologist.

EXPERTUS MEDICOFORENSIS - an expert/a doctor who possesses the required level of specialised knowledge and who has an experience to respond to the requirements needed to clarify the legally relevant facts.

Evaluation of severity of injury (qualification) - Determining the severity of the injury – both on the level of the local tissue damage and of the entire organism.

It should be noted that according to the LO, the medical qualification of the injury is performed by the doctor and the legislator decides between the following two qualifications: Bodily harm (U.S.A: bodily injury) and Grievous bodily harm (U.S.A: serious bodily injury). During the medical qualification of injuries, the experts should consider the legal regulation which reads as follows: "What kind of effect has been produced by the established injuries in this particular case and what kind of effects it could produce". The essence of this principle is the possibility of changes and the progress of the injury. In that sense, while determining the characteristics of the concrete injury, it is necessary to take into consideration the following issues: personal characteristic and special conditions.

The term immaterial damage refers to a damage resulting from harmful activities affecting the physical and psychological balance of the injured. The legal term of immaterial damage is common for all legal systems of the civilized countries and it is designed to protect the human life and health. This right has found place in the Resolution of the Council of Europe, as well as in the Constitutions of numerous countries. Under the new LO of 2008 (Article 186) physical pain,

mental pain and fear, the existence of ugliness, reduced activities of daily living (ADLs) are no longer compound elements of the immaterial damage or an independent legal foundation, but measures (qualification circumstances) that justify or do not justify the severity of the violation of the personal rights of the injured.