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# Analysis of medical-legal questions assessing the quality of emergency aid to for the injured with the musculoskeletal system lesion

### **ABSTRACT**

Providing quality of medical care is the main objective of the health system. While in Russia the priority interests of the patient are fixed at the legislative level. In 2004 the World Health Assembly defined the main task of modern medicine to radically increase the safety and quality of treatment. Criteria of safe medical care were defined. The article attempts to determine the medical and expert criteria for qualifying an emergency trauma care on the basis of the analysis of a large number of medical records, the sociological poll, both of doctors and patients, assessment of regulatory initiative on the legal legislative documents. We defined algorithm for estimating the quality of medical care for the injured with the musculoskeletal system lesion.

**Keywords:** quality of health care, emergency trauma care, quality assessment, treatment defects.

#### INTRODUCTION

Ensuring quality of care is the main goal of the health system. The Federal Law Ne323 "On the basis of the health of citizens in the Russian Federation" revealed the inner meaning of the terms: health, health protection, medical care, the procedure for medical care, the standard of care and quality of care. Also, the above Act legalized the priority interests of the patient. In 2004 the World Health Assembly claimed to identify the main problem of modern medicine - to radically increase the safety and quality of care. The criteria of the safety of medical care were defined, the main of which is the adequate assessment of the balance of risks and potential benefits of intervention. This task was set not by accident, because according to experts on patient safety at Harvard medical errors each year in 13.6% of cases lead to the death of patients, and 2.6% to disability [6]. In Russia, due to inadequate provision of emergency medical care in the hospital each year the number of cases of harm to life and health of citizens is about 70 thousand [1]. Injury is also clearly distinguished and regulated at the legislative level concept. And it can be applied to light, medium and severe damage to the patient's health, which established rules for determining the severity of harm to human health in Minzdavsotsrazvitiya Order [5]. Depending on the degree of violation of the quality of the health care for the health

worker can occur both administrative and legal responsibility that given the gravity of unlawful actions of medical personnel, if it is proven, is qualified under the relevant articles of the Criminal and Civil Code. To determine the degree of medical officer guilt at the legislative level, the notion of MC quality examination "revealing violations in the provision of MC, including the assessment of the correctness of the choice of medical technology, the degree of achievement of the planned results and the establishment of cause-effect relationships identified defects in the delivery of health care" is implemented. Activity of doctor traumatologist on emergency trauma care involves significant legal risks, as emergency medicine - is an independent specialized type of care. Emergency trauma patients are characterized by transience of pathological conditions, especially in the acute period of traumatic disease that allocates emergency trauma care in a special section and requires special approaches to the organization, the nature and manner of use of health care resources [3]. Transformations in health care, including issues of standardization of the compulsory medical insurance, an increase of citizens on forensics bodily harm in cases of damage caused by illegal actions, steady growth in litigation on the quality of care makes it relevant to development evidence-based recommendations aimed at improving the evidence of expert evaluation criteria of quality emergency care to victims with injuries of the musculoskeletal system.

We performed a retrospective analysis of medical records to provide emergency care to patients with trauma injuries: sheets accompanying the ambulance, the form №114 / 350 from the victims brought to the N.I.Pirogov Clinical Hospital №1 in the period from September 2012 to August 2013; 180 inpatient medical records, a form №033 / y; 50 minutes of meetings of subcommittees of deaths suffered trauma Profile for 2013-2014; Reports of heads of departments of trauma the state hospital No 1 named by Pirogov N.I. the last 5 years; 50 commission MEA on materials of criminal and civil cases involving compensation for damage to health by providing medical assistance to the victims with injuries of the musculoskeletal system. Studied 237 "prisoners" forensic examinations at the Bureau of Forensic Medicine of the Department of Health in Moscow for victims, which were caused by non-dangerous lifethreatening injuries, but entailed a lasting health disorder more than 21 days, and were regarded as damage entailing injury of moderate severity and where he participated as an expert trauma surgeon for the period from September 2011 to December 2013. To study the legal awareness of the doctors polled 80 experts trauma doctors to provide emergency medical care in Moscow. The age of respondents - from 27 to 62 years work experience - from 2 to 40 years, various

medical categories. The statistical study was carried out using the developed for this purpose questionnaire containing 38 multiple-choice questions. Among the questions of the questionnaire were the following: the existence of conflicts in the practice of doctors to provide emergency care, their causes and ways of solving them; knowledge of physicians regulations governing their professional activities; there is a requirement in their study on the protection of doctors from lawsuits from patients; the correctness of medical records. To study the degree of satisfaction of patients is currently provided emergency assistance and determine the approximate line of conduct in the event of conflict authors randomly surveyed 100 hospital patients who have received emergency trauma care. The patients - aged 18 to 82 years, of different social status. The survey was conducted by questionnaire from 25 questions.

Assessment of the quality of medical care to victims of trauma with injuries, carried out by the developed algorithm, which included several stages: information and analytical stage evaluation and correctness of medical documentation; assessment of quality performance of diagnostic and treatment activities in accordance with the procedures and standards of emergency care at the stages of diagnosis and treatment; detection of defects rendering health care on stages of its delivery; assessment of the impact of objective factors on the process and outcome of care. Defects of medical documentation in victims of trauma Profile are important in assessing the severity of the damage to health by unlawful injury. Thus, in 40.9% of cases are not given information about the presence or absence of external manifestations of trauma in the form of abrasions, bruises, wounds. If they have been recorded, they are not given enough full morphological characteristics (color, size, contours, the state of the surrounding and adjacent soft tissues, crust color, etc.). In particular, 17.0% of bruises from a medical point of view are described unsatisfactory and replaces the concept of not carrying sufficient information; in 8.0% of cases, discrepancies in the interpretation of the presence of lesions in the form of bruises and hematoma: the primary medical examination indicated hematoma, and at repeated - a bruise, despite the fact that there is a common notion of these entities and their contents. Every third victim is no indication on the nature of the damage, and exhibited clinical diagnosis does not correspond to the complaints of the patient and according to clinical symptoms.

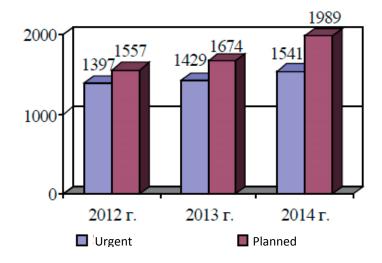


Fig. 1. The dynamics of the operational activity reports from Department Heads

Emergency trauma care becomes more specialized, technologically equipped and expensive, there is increase in surgical activity, and there is a rigorous growth in the number of emergency surgical procedures by an average of 25.0% per year (Fig. 1). According to the study commission examinations in criminal and civil cases the number of claims to doctors traumatologists is about 6.6% of the total number of examinations. The proportion of defects of medical care during hospital stay was 90.0%, pre-hospital, respectively 10.0%. Most often by patients to make a complaint to the provision of emergency trauma was 64.0% of health care. More than 90.0% of hospital mortality in victims of trauma related to the profile of the urgency of the hospitalization. According to the results of expert assessment of the causes of mortality of patients with trauma profile, delivered to the hospital for emergency indications are (data of protocols keels and drinking, as well as commissions of expertise): Late uptake in the hospital (not the principles of the "golden hour"), the patient has severe concomitant pathology, incurable patients, errors of doctors hospitals (unreasonable choice of treatment, improper assignment of medical treatment). The main criterion for the quality of emergency trauma patients is to achieve the best result of treatment. Fixed sets the standard in the diagnosis of subsequent treatment. In the study, we found that with respect to standards of care for patients the trauma profile, standardization of treatment is not perfect. There are certain limitations to standardize the diagnostic and treatment process. Medical science does not stand still, so a few years it seemed yesterday adopted the standards are out of date (for example, in the treatment of proximal femur fractures). Standards are constantly exposed to criticism from various schools who have other medical approaches (for example, many questions remain in the standardization of the treatment of patients with associated trauma). In practice, compliance with the requirements of standards (rather - treatment protocols containing the algorithm of therapeutic and diagnostic measures) is only possible for a small number of emergency conditions. So prehospital the criteria on the basis of which can be given to medical expert assessment diagnostic and treatment process, namely the presence of immobilizing fractures, aseptic bandage on the wound, anesthesia, its value, the measurement of blood pressure, catheterization of peripheral veins, the presence of fluid therapy, its volume, an electrocardiogram in the elderly.

Analysis of defects health care phases of its provision reveals shortcomings in the organization of treatment and diagnosis, that in the future will provide an opportunity to develop appropriate recommendations for improving the organization of the treatment process for patients of trauma profile. For example, if the study of pre-hospital phase of providing health care revealed that of the 350 brought to the emergency department at 196 (56.1%) of the patients brought to the hospital ambulance teams, diagnosed the injury, which does not require hospitalization. In this group of victims, while more accurate pre-hospital diagnosis, medical care could be provided at the level of trauma points, which greatly reduce the workload of the hospital and save the financial costs. Currently, there is such a situation that the work of SMEs depends largely on the quality of health clinics and emergency station that was repeatedly emphasized by other researchers. Thus, one of the main causes of unjustified referral hospital is the lack of qualified medical staff of health facilities that use the work of the NSR as a transport, as ambulance teams who come to these challenges is a paramedic and has no right to challenge the exhibited doctor LPU diagnosis. There is a defect in the organization of the treatment process.

It was revealed that the dissatisfaction of those surveyed patients is not due to the quality of the medical care and treatment on the part of medical staff (Fig. 2). According to the survey, 86.0% of respondents aged 30 years, ie, those who have already applied for emergency assistance previously noted that the overall culture of service in hospitals, including the work of all parts of the medical personnel has decreased significantly from the point of view of ethics. An increased number of conflict situations with patients. Thus, virtually all surveyed physicians (98.0%) indicated their presence. It is obvious that the violations are not always associated only with the actions of doctors. Thus, the reception waiting time, which is considered the patients to provoke conflicts, regardless how it was found only on the quickness of the physician rather from

its work organization system. Next - the lack of expected outcomes, which is primarily due to the limited resource capacity of existing health systems as part of the policy medical institution. At the same time we should not forget that the majority of our population is no motivation for health saving behavior against the backdrop of increasing expectations and demands [2]. Our investigations have shown 18.7% applied for emergency assistance burdened with alcohol or drugs.

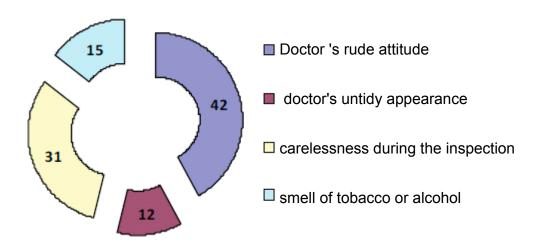


Fig.2. Assessment of quality of care among the potential patients of young age

The last few years in the national health care reform changes take place, aimed at its optimization. One outcome of reforms has become, for example, reducing the number of doctors on duty to provide urgent assistance. Currently undergoing public discussion of the draft order approving the typical industry standard time patient visits the doctor: over time the physician should establish contact with the patient at the level of understanding, then hold his examination (for example, in the case of injury it includes mandatory x-ray, ultrasound, general analyzes), prescribe treatment, direct hospitalization, fill the necessary documents [4]. The result is that the physician is not only "cargo" moral (for the life of the patient), but also legal liability. According to our research, in legal terms, medical staff is not sufficiently protected.

We believe that our analysis will improve the quality of trauma victims health care profile, as well as reduce the incidence of conflict between doctors and patients, to optimize the healing process, because «summum bonum medicinae sanitas» (Lat.) - The highest good of medicine is health.

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