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CRIMINOLOGICAL ASPECTS OF MEDICAL NEGLIGENCE

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Relevance of the topic. The problem of medical errors and negligent medical practice plays a key role in the debate on the quality and safety of medical care.

Purpose of the study. To study the phenomenon of careless medical crime and to develop recommendations for its prevention.

Material and methods. The study included a comprehensive analysis of literature sources selected from international citation databases such as Google Scholar, Web of Science, eLIBRARY and PubMed.

Results and their discussion. The main causes of negligent medical crime include lack of professional skills and knowledge, organizational problems in health care facilities, stress and overload of health care workers and inadequate or lack of control and monitoring of the quality of medical care. Prevention of careless medical crime requires a comprehensive approach, including improving the training and professional development of medical staff, implementing a system of quality control of medical care, conducting regular psychological training and counseling for health workers, and developing and implementing protocols and standards for safe medical practice.

Conclusion. Preventing careless medical crime requires a comprehensive approach, including educational, psychological and organizational measures. At the same time, attention should be paid not only to enhance the skills and knowledge of medical professionals, but also to create a favorable working environment.

Keywords: *medical negligence, criminology, medical law.*

Introduction

Medicine takes an important place in modern society, being a key factor in the health and well-being of the population. However, along with progress and achievements, there is the problem of negligent medical crimes. Negligent medical crime refers to acts or omissions of medical personnel that result in harm to the patient's health that is unrelated to the primary disease. Examples include medication dosing errors, surgical errors, or diagnostic misses.

The topic of negligent medical crime is becoming increasingly relevant in light of the growing number of medical errors caused by negligence or lack of professionalism of medical staff. Thus, according to the Investigative Committee of the Russian Federation, in 2021 compared to 2020, the number of citizens' appeals about iatrogenic crimes increased by 14.6%, while the number of

initiated cases increased by 27.8% [1]. This is not only due to the increase in the number of medical institutions and patients, but also due to increased public oversight and availability of information.

Raising this problem, it is impossible not to mention the moral side of the issue.

Doctors' credibility is the basis of the relationship between patient and health care provider. Each case of negligent medical crime destroys this trust, compromising the public perception of the profession overall.

In the context of modern medical science and practice, negligent medical crime is a topic that requires special attention. Despite numerous studies in the field of medical ethics and patient safety [2], many questions remain regarding the causes, consequences and prevention of such crimes.

In this regard, the purpose of this study is to investigate the phenomenon of negligent medical crime and to develop recommendations for its prevention.

Material and Methods

The study involved a comprehensive analysis of literature sources selected from international citation databases such as PubMed, Google Scholar, Web of Science and eLIBRARY, current regulatory and methodological documents, results of interviews with experts in the field of medicine and law.

Results and their discussion

Negligent medical crime: definition and characterization

Medical crime is a complex and multi-sided phenomenon, and, first of all, it is important to distinguish between its two categories: intentional and negligent crime. Dealing with this distinction is particularly important for justice, medical ethics and patient trust [3].

Intentional medical crimes involve the intention of a health care provider to harm a patient. Such behavior may be motivated by personal gain, revenge, or other reasons, and it often involves premeditation [4]. Examples include a physician who intentionally worsens a patient's condition for additional income or revenge.

Therefore, the act of a medical employee, which resulted in the occurrence of adverse consequences as a result of an error, can be recognized as a crime (offense) only if the error was the result of negligent actions (inaction) of the medical employee. That is, he either does not see the possibility of socially harmful consequences of his actions (inaction), but with the necessary care and prudence should have and could have foreseen them, or he foresees and does not want them to occur, but without sufficient grounds presumptuously expects to prevent them. In this case, the person does not regard his actions as socially

dangerous, although he realizes that they break certain rules of care [5].

Negligent medical crime has many consequences for patients, their families and the medical profession as a whole. Understanding its forms makes it possible to detect and prevent errors in time, and to improve systems of care [2].

One of the most common forms of negligence is medical error. Wrong dosage, incorrect use or prescription of drugs with contraindications can lead to serious side effects or even lethal outcomes [6].

Diagnostic errors are also a significant problem. A missed or misdiagnosed diagnosis can lead to inappropriate treatment, making the patient's condition worse or losing the chance for timely treatment [7].

Surgical errors, such as operating on the wrong organ or leaving instruments inside the patient's body, although rare, can have catastrophic consequences [8].

Negligence is also an important manifestation of carelessness, which can lead to infectious complications such as sepsis or other forms of hospital infections [9].

The main characteristic that distinguishes a medical error from a negligent crime committed by a medical employee is the impossibility for a medical employee to realize the wrongness of his actions due to objective reasons.

In this context, the classification of medical errors into three categories proposed by V.T. Palchun represents interest [10]. The first category is medical errors with causing harm to the patient, the causes of which are beyond the knowledge and skills of modern medicine, or they occurred accidentally, independently of the doctor. It is impossible to foresee and prevent such errors; they do not constitute a felony or tort, so they are not punishable. The second category – errors with causing harm to the patient, committed by the doctor unintentionally while performing his professional duties in a responsible and qualified manner in relation to this and other patients; they do not contain the elements of a crime and misconduct, which is defined by the professional medical staff. These errors are related to gaps and inaccuracies in medical knowledge. There is no legal prosecution in such cases. The third category of medical errors with causing harm to the patient is caused by irresponsible actions of the doctor, negligence, carelessness, elementary medical ignorance, moral and ethical fault, which are legally qualified as a crime or misconduct and therefore legally punishable.

Personality of the offender who commits negligent acts in medicine

The criminological study of the personality of the offender is important not only for identifying and evaluating those qualities that give rise to or contribute to criminal behavior, but also for the purpose of preventing as well

as predicting this behavior [11].

When considering the personality of a health care employee who may commit a careless act, it is important to realize that it is usually not the result of willful intent to cause harm.

Careless acts in medicine can have a variety of causes, and in some cases, these causes are rooted in the *psychological profile* of the health care provider's personality. Understanding the psychological profile of such personalities allows developing policies to reduce risks and improve patient safety [12].

One of the key psychological attributes may be overwork. With long shifts and high levels of stress, medical professionals may experience exhaustion, which decreases their attentiveness and increases the potential to make errors [13].

High levels of self-confidence may also contribute to carelessness. Physicians who overestimate their skills or who engage in carelessness recommendations may make errors due to lack of checking or consultation with colleagues [14].

Also, the constant pressure of being responsible for the health of patients can undermine a health professional's ability to make the right decisions [15].

Medical practice is a complex combination of knowledge, skills, and professional experience. However, even with in-depth education and experience, medical professionals can make mistakes. But what can cause this to happen?

The initial education and training of medical professionals can play a key role. If the education process does not include enough practice or simulation training, doctors and nurses may not be adequately prepared for complex situations in real-world practice [16].

Lack of continuing medical education may also contribute to carelessness. Medical science is rapidly evolving, and without regular refreshing their knowledge, professionals may use outdated techniques or ignore new approaches [17].

Lack of experience, especially in specialized fields, can increase risks. Young physicians who have just completed their internship may encounter rare or complex cases that they have not previously handled [18].

In addition, professional burnout or lack of motivation may reduce interest in additional education or self-study of new techniques and approaches, which may also affect the quality of care provided [19].

Social and demographic characteristics may influence the probability of negligent acts in medicine. Attention to these aspects allows for a better understanding and prevention of potential medical errors.

Young professionals who have just completed their education may be

more at risk due to lack of experience and overestimation of their skills [20]. On the other hand, older medical professionals may experience a decline in psychophysical abilities.

Gender may also influence medical decisions. Some studies indicate differences in diagnostic and treatment approaches between men and women [21].

Sociocultural context and ethnicity may determine attitudes toward medical practice and interactions with patients. Physicians from different cultures may interpret clinical symptoms differently or have different approaches to treatment [22].

Education and professional status may also influence medical decisions. Physicians with higher rank or longer experience may tend to be less cooperative or less likely to consult or collaborate with colleagues, which may increase risks [23].

Causes and conditions of careless medical crime

It has been noted above that careless medical crime is usually not the result of intentional acts, but rather the result of various circumstances affecting the practice of medical staff [2].

Professional skills and knowledge play a key role in the successful career and profession growth of the medical profession. However, deficits in these competencies can cause serious problems that range from individual failures to large-scale socioeconomic consequences.

Lack of professional skills and knowledge can be attributed to a variety of reasons. Lack of education is one of the main reasons. The desire to save money on educational programs or lack of access to quality education can lead to this deficit [24].

Rapid technological development can also cause skill shortages, as the demands of professions evolve at a speed that educational institutions cannot always keep up with [25].

The gap between theory and practice in educational institutions can also contribute to skill deficits when students learn outdated methods or do not get practical experience [26].

The consequences of such deficiency can be varied. It can include low productivity, increased work errors, and even harmful situations in some professions such as medicine or construction [27].

Organizational problems in health care institutions are a hot topic of discussion among health care professionals. Despite constant innovation and development of medical technologies, managerial and structural issues continue to be a difficult task for many institutions [28].

One of the major organizational challenges is the inadequate funding of health care institutions. This can lead to lack of equipment, inadequate working conditions and inadequate salaries for health workers [29].

The problem of staff overload is also widespread. Due to high pressure and limited resources, many doctors and nurses work under overworked conditions, which can increase the risk of medical errors [30].

In addition, ineffective communication between departments and medical professionals can lead to inadequate patient care and quality of medical services [31].

Difficulties in incorporating new technologies into medical practice can also be an organizational challenge. Many institutions face difficulties in training their staff on new systems and technologies [32].

Complex tasks, high responsibility and constant communication with patients make the medical profession one of the most stressful professions where *psychophysiological stress* is an issue [33].

Stress may arise due to various factors. First, the emotional pressure of dealing with patients and their families, particularly in critical situations, can put mental strain on the physician's psyche [33]. Secondly, physical overload due to long hours, lack of staff and the need to make quick decisions also contribute to stress levels [34].

The problem gets worse with inadequate time for rest and recreation, which makes medical professionals vulnerable to professional burnout [35]. This not only impairs the quality of care, but also affects physicians' well-being by increasing the risks of depression, anxiousness (obsessive fears and anxiety states) and other psychological problems [15].

Finally, some health care systems lack adequate *monitoring and quality control* of health care services [36]. This can lead to serious consequences for patients, including poor health, unnecessary costs and even death.

One of the main problems is the absence of quality standards that would allow comparison of results and practices between different health care providers [37]. Without these standards, it is difficult to determine which practices are most effective and safe.

Ways and means of preventing careless medical crime

Preventing careless medical crime requires a comprehensive approach that includes a variety of measures at the system and individual level.

New studies, treatments and technologies are constantly being introduced into clinical practice, making it *necessary for medical staff to keep their knowledge up-to-date.* The importance of continuing medical education is

directly related to patient safety and treatment effectiveness and cannot be underestimated [2]. Studies have confirmed that physicians who systematically improve their competencies make less errors [38].

Modern medical education should include not only academic disciplines, but also practical training, simulations, and programs on stress management and decision making in extreme situations [39]. These will help the nursing staff to effectively cope with work pressures and make reasoned decisions.

Professional burnout, stress and emotional exhaustion are real problems faced by many health workers. Regular psychological training and counseling can be a key tool in preventing careless medical crime.

The application of these practices can be a prevention of many errors caused by stress, burnout, or emotional overload. It can also help to create a positive psychological climate in the team and build trust between colleagues [40].

In an environment of high liability and potential risk to patient's lives, having clear protocols and standards of practice becomes essential. These tools provide health care professionals with reliable recommendations and guidelines, ensuring consistency and quality of patient care [41]. They help medical professionals to make the right decisions in complex clinical situations, reducing the potential for human error.

The implementation of monitoring and quality control systems may be a driver of continuous improvement in medical practice. For example, the use of electronic medical records allows automatic analysis of data and identification of deviations in treatment practices that may indicate potential errors [42]. Regular auditing of health care institutions, analyzing cases where errors have occurred, and providing feedback to health care providers to implement improvements ensure continuous analysis of the quality of care provided, identifying deficiencies and potential risks, ultimately leading to improved patient safety [43]. The absence of such systems can lead to an increase in careless medical crime [36].

Educational programs for health care providers that focus on patient safety also play a key role in quality control [44]. Such training aims to create a culture of safety in which each team member understands his or her responsibilities and is dedicated to fulfilling them.

A central part of any successful medical system is a culture of safety, in which mistakes are not viewed as failures but as opportunities for learning and improvement. Only in such a culture will medical staff feel comfortable acknowledging and analyzing their mistakes, which will ultimately lead to improved patient safety [45].

Conclusion

The medical profession is one of the most responsible and complex fields where mistakes can cost the lives of patients. Negligent medical crime occurs when these errors are the result of negligence or lack of skill and not of intentional purpose.

The identity of the medical professional who makes the error is often influenced by multiple factors, including stress, lack of training or resources, and organizational problems. However, it is important to distinguish between a careless error and a intentional act.

Training and professional development are key components to prevent medical errors. Implementing quality control systems, psychological support for health care providers, and developing and enforcing safety standards can significantly reduce risks.

Preventing careless medical crime requires a comprehensive approach, including educational, psychological and organizational measures. At the same time, attention should be paid not only to enhance the skills and knowledge of medical professionals, but also to create a favorable working environment.

Collaboration between healthcare institutions, regulatory bodies and educational institutions can play a key role in creating a safe environment for patients and healthcare professionals.

References:

1. BESCARAVAYNAYA, T. SK provided new data on the number of medical professionals accused of iatrogenic crimes. Medvestnik. [Accesat: 27.11.2023] Disponibil: https://medvestnik.ru April 21, 2022
2. MAKARY, M.A., & DANIEL, M. (2016). Medical error—The third leading cause of death in the US. In: BMJ, 353, i2139.
3. WACHTER, R. M. Understanding patient safety. McGraw Hill Professional, 2012. 320 p.
4. National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Health Sciences Policy. Physician-Assisted Death: Scanning the Landscape: Proceedings of a Workshop. Washington (DC): National Academies Press (US); 2017 Jun 27.
5. GRIGORYAN, K. V. Criminological Concept of Medical Error. In: Scientific Portal of the Ministry of Internal Affairs of Russia, No. 4, 2011, pp. 56-59.
6. BATES, D. W., CULLEN, D. J., LAIRD, N., et al. (1995). Incidence of adverse drug events and potential adverse drug events. In: JAMA, 274(1), 29-34.
7. GRABER, M. L., FRANKLIN, N., & GORDON, R. (2005). Diagnostic error in

internal medicine. In: Archives of internal medicine, 165(13), 1493-1499.
8. GAWANDE, A. Complications: A surgeon's notes on an imperfect science. Picador, 2002. 28 p.
9. PITTET, D., ALLEGRANZI, B., & BOYCE, J. (2009). The World Health Organization guidelines on hand hygiene in health care and their consensus recommendations. In: Infection Control & Hospital Epidemiology, 30(7), 611-622.
10. PALTCHUN, V. T. Medical Errors – Classification and Prevention. In: Vestnik Otorhinolaryngology, 2008, No. 1, p. 4.
11. Criminology: Textbook / Ed. N. F. Kuznetsova, V. V. Luneva. 2nd ed. M., 2004. P. 2.
12. HELMREICH, R. L. (2000). On error management: Lessons from aviation. In: BMJ, 320(7237), 781-785.
13. BARGER, L. K., AYAS, N. T., CADE, B. E., et al. (2006). Impact of extended-duration shifts on medical errors, adverse events, and attentional failures. In: PLoS medicine, 3(12), e487.
14. BERNER, E. S., & GRABER, M. L. (2008). Overconfidence as a cause of diagnostic error in medicine. În: The American journal of medicine, 121(5), S2-S23.
15. MASLACH, C., & JACKSON, S. E. (1981). The measurement of experienced burnout. În: Journal of Organizational Behavior, 2(2), 99-113.
16. ERICSSON, K. A., & CHARNESS, N. (1994). Expert performance: Its structure and acquisition. În: American psychologist, 49(8), 725.
17. MOORE D. E. Jr., GREEN J. S., GALLIS H. A. Achieving desired results and improved outcomes: integrating planning and assessment throughout learning activities. In: J Contin Educ Health Prof. 2009 Winter;29(1):1-15.
18. NORMAN, G. R., & BROOKS, L. R. (1997). The non-analytical basis of clinical reasoning. În: Advances in Health Sciences Education, 2(2), 173-184.
19. SHANAFELT, T. D., HASAN, O., DYRBYE, L. N., et al. (2015). Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. In: Mayo Clinic Proceedings, 90(12), 1600-1613.
20. EVA, K. W., & REGEHR, G. (2008). “I'll never play professional football” and other fallacies of self-assessment. In: Journal of Continuing Education in the Health Professions, 28(1), 14-19.
21. KIM, C., MCEWEN, L. N., KIEFFER, E. C., HERMAN, W. H., & PIETTE, J. D. (2008). Self-efficacy, social support, and associations with physical activity and body mass index among women with histories of gestational diabetes

mellitus. In: The Diabetes Educator, 34(4), 719-728.
22. BETANCOURT, J. R., GREEN, A. R., CARRILLO, J. E., & ANANEH-FIREMPONG, O. (2003). Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and health care. In: Public health reports, 118(4), 293-302.
23. SUTCLIFFE, K. M., LEWTON, E., & ROSENTHAL, M. M. (2004). Communication failures: an insidious contributor to medical mishaps. În: Academic Medicine, 79(2), 186-194.
24. BOK, D. (2006). Our Underachieving Colleges: A Candid Look at How Much Students Learn and Why They Should Be Learning More. Princeton University Press.
25. FRIEDMAN, T. L. The World is Flat 3.0: A Brief History of the Twenty-first Century. Picador, 2003. p. 288.
26. BARNETT, R. (1994). Limitations of competence-based assessment in higher education. In: Quality in Higher Education, 1(2), 67-77.
27. SHUTE, V. J., & BECKER, B. J. Innovative assessment for the 21st century: Supporting educational needs. Springer, 2010. 257 p.
28. GAWANDE, A. (2009). The Checklist Manifesto: How to Get Things Right. Metropolitan Books.
29. WOOLHANDLER, S., & HIMMELSTEIN, D. U. (2004). The high costs of for-profit care. În: CMAJ, 170(12), 1814-1815.
30. WACHTER, R. M. (2017). The Digital Doctor: Hope, Hype, and Harm at the Dawn of Medicine's Computer Age. McGraw-Hill Education.
31. LEONARD, M., GRAHAM, S., & BONACUM, D. (2004). The human factor: the critical importance of effective teamwork and communication in providing safe care. In: Quality and Safety in Health Care, 13(suppl 1), i85-i90.
32. TOPOL, E. The Patient Will See You Now: The Future of Medicine is in Your Hands. Basic Books, 2016. p. 400.
33. SHANAFELT, T., & NOSEWORTHY, J.H. (2017). Executive Leadership and Physician Well-being: Nine Organizational Strategies to Promote Engagement and Reduce Burnout. In: Mayo Clinic Proceedings, 92(1), 129-146.
34. DYRBYE, L.N., et al. (2017). Burnout among health care professionals: A call to explore and address this underrecognized threat to safe, high-quality care. In: National Academy of Medicine.
35. PANAGIOTI, M., GERAGHTY, K., JOHNSON, J., et al. Association Between Physician Burnout and Patient Safety, Professionalism, and Patient Satisfaction: A Systematic Review and Meta-analysis. In: JAMA Intern Med. 2018 Oct 1;178(10):1317-1331.

36. Institute of Medicine (US) Committee on Quality of Health Care in America. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington (DC): National Academies Press (US); 2001.
37. DONABEDIAN, A. (1988). The quality of care: How can it be assessed? In: JAMA, 260(12), 1743-1748.
38. ERICSSON, K. A., & CHARNESS, N. (1994). Expert performance: Its structure and acquisition. In: American Psychologist, 49(8), 725.
39. ISSENBERG, S. B., MCGAGHIE, W. C., PETRUSA, E. R., et al. (2005). Features and uses of high-fidelity medical simulations that lead to effective learning: a BEME systematic review. In: Medical Teacher, 27(1), 10-28.
40. LAMOTHE, M., BOUJUT, E., ZENASNI, F., & SULTAN, S. (2014). To be or not to be empathic: the combined role of empathic concern and perspective taking in understanding burnout in general practice. În: BMC Family Practice, 15(1), 15.
41. Institute of Medicine (US) Committee on Quality of Health Care in America. To Err is Human: Building a Safer Health System. Kohn LT, Corrigan JM, Donaldson MS, editors. Washington (DC): National Academies Press (US); 2000.
42. BOJKE, L., CLAXTON, K., BRAVO-VERGEL, Y., et al. (2007). Eliciting distributions to populate decision analytic models. In: Value in Health, 10(5), 421-429.
43. JAMES J. T. A new, evidence-based estimate of patient harms associated with hospital care. În: Journal of patient safety. 2013;9(3):122-128.
44. FRANKEL, A., GRILLO, S. P., PITTMAN, M., et. al. (2008). Revealing and resolving patient safety defects: the impact of leadership Walk Rounds on frontline caregiver assessments of patient safety. In: Health Services Research, 43(6), 2050-2066.
45. DEKKER, S. Just Culture: Balancing Safety and Accountability. London: CRC Press. 2016. 200 p.