

Review article

The Impact of Professional Liability Insurance on Physicians' Mental Health: International Evidence and Policy Implications for Kazakhstan

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Abstract

Introduction. Professional liability insurance is a main regulatory instrument used to ensure financial compensation for patients and protect physicians from the economic consequences of medical errors. However, beside its financial and legislative aspects, malpractice cases and liability exposure are significant psychological stress factors for the medical professionals. Previous literature on the question have provided an evidence of increased levels of emotional exhaustion, anxiety, depressive symptoms, and defensive medical practices. Physicians frequently report persistent psychological distress during and after legal proceedings, even when financial damages are covered by insurance. Studies conducted in the United States, Europe, Asia, and Australia demonstrate that litigation-related stress may alter clinical decision-making, reduce job satisfaction, and contribute to workforce attrition. In healthcare systems with compulsory professional liability insurance, financial protection may decrease the economic insecurity. Even so, the psychological burden caused by the legal scrutiny, reputational risk, and institutional investigation often remains significant. In transitional health systems, including countries of Central Asia, insufficient clarity of legal standards and the risk of criminal prosecution may intensify professional stress and feelings of vulnerability. This review aims to provide a synthesis of international literature from 2015 to 2025 on the relationship between professional liability insurance, the risks of malpractice, burnout among physicians, defensive medicine, and the stability of the workforce. Special emphasis is made on the comparison between the experiences of different countries regarding the mandatory and voluntary nature of insurance and its possible implications for mental well-being. The findings suggest that although insurance offers structural economic solutions, it does not necessarily reduce the mental pressure of malpractice risks. It is necessary to integrate various strategies to reduce the mental pressure of litigation risks among healthcare professionals. It is also necessary to assess the recent insurance system

reforms in Kazakhstan from the perspective of international literature and conduct more studies on the long-term impact of the reforms on the mental safety of physicians.

Keywords: professional liability insurance, medical malpractice, physicians, burnout, professional, stress, psychological, mental health, health policy, occupational stress.

1. Introduction

Professional liability insurance has become a key governance instrument in modern health systems, with a main aim to balance patient rights with clinician protection in an increasingly litigated clinical environment. In Kazakhstan and several comparable jurisdictions, policy discussions emphasize that, despite regulatory variation, professional liability insurance is designed to protect physicians from financial risk while ensuring compensation mechanisms for patient harm [1].

However, international evidence suggests that the psychological burden caused by the malpractice exposure often still considered as a significant issue even when financial coverage exists. A systematic review in JAMA highlighted global variability in physician burnout estimates, reflecting both measurement heterogeneity and the scale of the problem across settings [2].

At the level of liability-specific stressors, a big study in China identified that fear of malpractice is related to burnout, with “legal consciousness” mediating the relationship and thereby supporting the hypothesis that perceptions of legal liability are not simply contextual factors but are instead organized driver of distress in their own right [3].

Likewise, a survey of claim-exposed physicians reported that more than half experienced a major psychological reaction to malpractice claims and changed their practice as a results of exposure [4].

At the system level, defensive medicine is highly prevalent internationally: a 2000–2022 systematic review and meta-analysis estimated a pooled prevalence around three-quarters of physicians, and prior medico-legal

litigation experience was associated with higher odds of defensive practice [5].

Finally, previous literature identified that there is a strong relationship between recent malpractice suits and burnout, depression, and suicidal ideation - underscoring that malpractice stress can translate into clinically relevant mental health outcomes among surgeons in the US [6].

Aim of this review: to find an empirical evidence on how malpractice risk (fear, claims exposure, litigation) and professional liability insurance arrangements relate to physicians’ psychological outcomes (burnout, distress, anxiety/depression, quality of life) and defensive medical behaviors across different countries.

Research Objectives. To achieve this aim the review has been created to address related goals. First, to assess the psychological and occupational consequences of malpractice claims and litigation fear among physicians, with specific attention to outcomes such as burnout, anxiety, depression, and health-related quality of life. Second, it also aims to study how being sued impacts the way doctors behave, including defensive medicine, changes in clinical decision-making, and willingness to leave the profession. Third, it aims to compare approaches of different countries to liability insurance for professionals, including mandatory and optional insurance and the way they affect stress levels. Finally, it identifies research gaps and formulates policy-relevant implications for strengthening the legal and psychological protection of medical professionals in Kazakhstan.

2. Materials and Methods

The review was done using an approach to combine the findings following the guidelines of a systematic literature review. The review was conducted by searching literature databases, which included: PubMed/MEDLINE, Scopus, and Web of Science The search was designed to find literature published from

January 2010 to March 2025. The goal was to capture developments in malpractice regulations professional liability insurance schemes and mental health studies among physicians. The search used a mix of free-text terms. These terms covered aspects of professional liability exposure such as: “Medical malpractice”,

“Professional liability”, “Malpractice claim”, “Litigation”, “Medical liability insurance”. The search also used terms that described the target population, which included: “Physician”, “Doctor”, “Surgeon”, “Health personnel”. Additionally terms describing health outcomes were used, such, as: “Burnout”, “Professional burnout”, “Psychological distress”, “Anxiety”, “Depression”, “Mental health”, “Second victim”, and “Defensive medicine”. The search terms were combined using Boolean operators.

The review included a wide range of studies, such as quantitative cohort studies, cross-sectional studies, case-control studies, qualitative research, systematic reviews, and meta-analyses. Every research included in the review explored the way malpractice exposure or liability systems affect physicians’ psychological state or professional behavior. Studies that considered only legal theory, without presenting any empirical evidence, were excluded. Articles were limited to peer-reviewed publications in English or Russian. The removal of duplicates was followed by the screening of titles and abstracts of the studies. After that, the full-text review using predefined inclusion criteria was conducted. Data extracted from studies included: study design, country, sample size, type of malpractice exposure, psychological outcomes examined, and main quantitative results, such as odds ratios, relative risks, and prevalence estimates.

Because of the high heterogeneity of the designs of studies, outcome measure, and legal context, conducting a formal meta-analysis was not appropriate. Instead, the findings were organized and analyzed thematically. Particular attention was given to cross-country differences and possible methods through which professional liability insurance may change physicians’ perceived legal vulnerability and psychological well-being. The methodological quality of the included studies was reviewed descriptively, with consideration of factors, such as sample size, study design, and the measurement tools used.

Psychological Impact of Malpractice Risk and Liability Exposure on Physicians

Recent literature shows that fear of professional liability and the associated legal risks significantly affect physicians’ mental health. A number of publications have shown that fear of complaints and litigation increases levels of burnout and anxiety among medical professionals. In a large cohort study of Chinese physicians, a high level of fear of malpractice claims was found to correlate with severe professional burnout. The presence of a “fear of being held liable” was shown to nearly triple the risk of emotional burnout in clinical practice (relative risk ≈ 2.9) [3]. Similarly, in Taiwan,

physicians involved in malpractice litigation demonstrated significantly poorer general and mental health scores on the SF-36 scale compared to colleagues who had not been involved in such disputes. Taken together, these and other findings show a direct association between legal vulnerability (or experience of litigation) and deterioration in physicians’ psycho-emotional well-being [7].

Recent studies also showed that the fear of professional liability and related legal risks can have a significant negative effect on medical professional’s mental health.

Fear and burnout. Liang et al. (2022) demonstrated that more strongly physicians feared possible claims, the higher their levels of emotional burnout. Likewise, other studies also provide an evidence that the threat of a lawsuit or complaint can trigger substantial stress, depression, and decreased self-esteem, particularly in countries where litigation against medical professionals is more common.

The “second victim” after litigation. The concept of the “second victim” implies that physicians themselves experience psychological trauma after being involved medical errors or malpractice claims. Tan et al. (2019) identified that physicians who had served as defendants in malpractice disputes had statistically significantly lower scores on physical and mental health scales. This suggests a long-term negative impact of litigation on physicians’ quality of life [7].

Increased anxiety. In many countries, physicians live with constant fear of unfounded complaints, which increases their stress levels. According to official statistics, more than 7,000 complaints are submitted annually to the Ministry of Health of the Republic of Kazakhstan [8]. In 2024, more than 13,500 complaints were filed with the Social Health Insurance Fund, nearly 98% of which concerned the quality, organization, and accessibility of medical care [9]. During the first five months of 2025, 10,363 complaints were submitted to the Fund, of which 5,073 were withdrawn. This represents an 11.7% decrease compared to the same period in 2024, when 11,745 complaints were received (5,167 withdrawn) [10]. At the same time, the number of cases that went to court was continuously rising, which often lead in substantial compensation payments to patients.

Surveys conducted in Kazakhstan and other CIS countries suggest that approximately half of physicians live with the fear of patient complaints. This is supported by clinical research that provide an evidence of an association between fear of punishment and deterioration in medical professionals’ mental health. Professional liability insurance is intended to reduce the financial consequences of claims brought against

physicians, but the psycho-emotional impact is not removed. Even when covered by an insurance policy, the litigation process itself and potential reputational remain a major source of emotional stress.

Decreased job satisfaction. In a Turkish study by Dirvar et al. (2021), orthopedic physicians who had faced malpractice claims showed an increase in emotional burnout and decrease in job satisfaction. Most respondents related the emergence of defensive medicine and unnecessary diagnostic testing with fear of being accused. Insurance payments covered only part of the damage: among physicians who lost their cases, only a minority received compensation from insurers [11].

Limitations of insurance protection. Even in countries with well-developed insurance systems, compensation often covers no more than 20–30% of claimed amounts, which later increases physicians' anxiety. In addition, studies show that the fact of being involved in the litigation significantly influence physician behavior, often leading to excessive caution and defensive medicine, regardless of the final outcome or size of the compensation. Thus, while insurance provides financial protection, it does not eliminate the psychological burden associated with investigations and complaints [11].

Overall, the evidence points out three interlocking domains: clinician psychological impact of claims and fear; defensive medicine as a behavioral response; and the role of insurance and system design in shaping both distress and practice.

With regard to psychological impact, studies consistently show that being involved in malpractice claims or disputes is related with measurable harm to clinician well-being. The strongest quantitative evidence comes from large surveys in high-litigation settings and from claim-exposed cohorts. In the United States, a national survey of surgeons found that nearly one-quarter reported involvement in a malpractice suit in the prior 24 months, and that those with recent suits had higher rates of burnout (31.9% vs 25.2%), depressive symptoms (46.6% vs 36.9%), and suicidal ideation (6.4% vs 4.0%) [6]. These are not minor differences as they represent outcomes with serious clinical and workforce implications. The same data indicate reduced career satisfaction and lower quality-of-life scores among those sued, supporting a model in which malpractice exposure negatively affect both mental health and professional identity.

In Taiwan, a large survey of primary care physicians found that experience with malpractice dispute was related with significantly lower health-related quality of life, including mental health and vitality, even after adjustment with propensity score

methods [12]. Similar relationship can be seen in Europe. In Spain, claim-exposed physicians demonstrate high distress prevalence. A questionnaire study of claimed physicians found that most suffered significant emotional distress regardless of claim outcome, and that symptoms were associated with changes in professional conduct [13]. A larger telephone survey of physicians with recent open or closed claims found that more than half reported psychological reactions, and almost half reported practice changes. Importantly, those facing criminal proceedings were more likely to report psychological impact, suggesting that criminal exposure can intensify distress even more than civil claims [4].

In the defensive medicine domain, multiple researches show that defensive practice is widespread and may be near-universal in high-liability settings. The Pennsylvania survey of high-risk specialists showed that 93% of respondents reported defensive medicine and substantial avoidance behaviors, including limitation of practice scope and avoidance of complex or perceived litigious patients [14]. National specialty surveys similarly show high rates of additional imaging/tests and avoidance of high-risk procedures due to liability concerns. These findings show that defensive medicine is not limited by “more testing” to include practice restriction and avoidance, which can affect patient access and potentially shift risk burdens to other providers or settings.

Meta-analytic evidence strengthens the conclusion that defensive medicine is global phenomenon. A systematic review and meta-analysis estimated a pooled defensive medicine prevalence around 75.8% and identified prior medicolegal litigation as an important contributing factor (OR ~1.65) [5]. This suggests that once medical experts experience litigation, defensive behaviors may become reinforced-consistent with a learning/conditioning model of threat responses.

The role of liability insurance extends beyond solely financial protection. In the Pennsylvania study, defensive practice was strongly associated with lack of confidence in liability insurance and perceived burden of premiums, implying that insurance design and trust in coverage may modulate defensive behavior [14]. Among neurosurgeons, malpractice premiums were frequently described as a major or even extreme burden [15]. These findings are consistent with broader evidence that design of the legal system and reforms can shift utilization and spending patterns: systematic reviews indicate that caps on noneconomic damages are associated with decreased defensive medicine and health spending and increased physician supply, though effects on measured quality of care remains mixed [16].

From cross-national perspective, administrative and no-fault schemes may reduce adversarial pressure and expedite compensation, but direct evidence on clinician mental health benefits is still limited. At the same time, macro-level studies report that no-fault medical injury compensation systems can affect national health expenditures, suggesting that the structure of compensation systems has measurable consequences at the system level [17].

In the CIS countries, the institution of professional liability insurance for physicians is still in the development phase. In Russia, the idea of mandatory insurance has been discussed for several years, and relevant draft laws have repeatedly been submitted to the State Duma of the Russian Federation (for example, in 2023 a draft law on mandatory insurance for physicians was prepared). The authors of this initiative argued that insurance coverage would simplify the process of compensating patients for harm caused by medical errors and reduce the number of lawsuits [18,19]. However, as of 2025, a comprehensive system of medical malpractice insurance has not been implemented in Russia: there is no institution of mandatory liability, and policies are issued only on a voluntary basis. Experts continue to stress the need for the prompt establishment of an insurance system covering the main professional risks faced by physicians in order to reduce the number of criminal cases and civil claims brought against medical workers.

Until recently, Kazakhstan also did not have a system of mandatory medical liability insurance. Only certain physicians or clinics held voluntary policies, and overall physicians felt legally vulnerable. Surveys show that a substantial proportion of doctors in Kazakhstan constantly experienced stress due to the risk of complaints and sanctions from patients. For example, in a qualitative study conducted in 2022, many physicians in Kazakhstan reported a “sense of insecurity” and fear of being accused, mainly because of the unclear legal regulation of medical errors [20]. Criminal liability for unintentional medical offenses — including causing grievous bodily harm or death through negligence — has long been part of Kazakhstan’s legal framework: it was provided for under the criminal legislation of the Kazakh SSR, retained in the 1997 Criminal Code, and remains in force under the current 2014 Criminal Code. However, the absence of clearly defined legal criteria for distinguishing criminal negligence from an ordinary medical error, combined with the lack of an institutional insurance mechanism, created conditions of heightened professional vulnerability. On the one hand, patients could hardly be compensated without the physician effectively admitting fault. On the other hand, potential

sanctions could be imposed personally on the medical professional. The absence of an insurance “safety net” was combined with a high level of professional anxiety among Kazakhstani physicians, with surveys reporting that more than half of medical specialists in the country constantly experience significant stress because of the threat of complaints and punishment.

Only in 2024 was liability insurance for medical workers introduced in Kazakhstan, using the capacity of the insurance market (with insurance premiums paid by the medical organization). One of the mandatory conditions for carrying out medical practice is the conclusion by medical organizations and private practitioners of a co-insurance agreement for professional liability with an insurance company that is a member of a unified insurance pool. An important requirement is that such an agreement must be concluded prior to the commencement of professional activities by medical workers.

Under Kazakhstani law, compensation for harm caused to a patient’s life or health does not exclude criminal liability of the medical worker. In cases where harm of moderate severity, grievous bodily harm, or death is caused by negligence, criminal proceedings are initiated against the medical professional. Measures of liability for such criminal offenses are provided in Chapter 12 of the Criminal Code of the Republic of Kazakhstan [21]: improper performance of professional duties by a medical or pharmaceutical worker (Article 317), failure to provide medical care (Article 320), and disclosure of medical confidentiality (Article 321).

In Kazakhstan, discussion regarding the limits of decriminalization of medical practice has been ongoing for a long time. The impetus for this debate was an instruction by the Head of State, K.-J. Tokayev, delivered at the third meeting of the National Council of Public Trust, where he emphasized the need to reconsider criminal prosecution for so-called “medical errors” and to critically assess the appropriateness of criminal liability for medical professionals for “improper performance of their duties.” At the same time, he stressed that this “does not remove physicians’ responsibility for the life and health of citizens, but such responsibility should be administrative and civil in nature, as in developed countries of the world” [22].

The European Court of Human Rights (ECHR) allows for criminal prosecution only in situations involving intentional acts or gross negligence by a medical professional that threaten a patient’s life [23]. In its case law, the Court maintains that the right to life, as provided for in Article 2 of the Convention for the Protection of Human Rights and Fundamental Freedoms [24], does not require mandatory criminal prosecution of

a medical worker who has negligently caused harm to a patient's life or health. Compensation within the framework of civil proceedings may be sufficient. These and other issues require a more thorough and balanced approach, with the involvement of both scholars and practitioners.

Thus, in developed insurance systems physicians are more often protected by actual financial coverage of damages, whereas in CIS countries a greater legal and

financial burden falls on physicians. The introduction of mandatory insurance for physicians in CIS countries could help reduce this pressure. In Kazakhstan, the introduction of insurance has primarily been associated with ensuring financial protection for medical workers. However, there is still a lack of scholarly research examining the impact of such reforms on physicians' mental health.

Table 1 - Key International Studies on Malpractice Litigation Risk and Physicians' Psychological Outcomes

Country	Study Objective	Main Findings
India [24]	Review of the consequences of malpractice claims against healthcare professionals	Malpractice lawsuits cause significant psychological stress among physicians, including emotional disturbances (anger, anxiety, depression, insomnia), manifestation of the "second victim" syndrome with phases of grief, and increased suicide risk. Indemnity insurance and institutional psychological support were recommended.
China [3]	Association between fear of malpractice litigation and burnout	56% of physicians reported moderate to high fear of malpractice claims. High levels of fear increased the likelihood of burnout nearly threefold (RR $\approx$ 2.9). Legal awareness partially attenuated the association between fear and burnout.
Taiwan [25]	Assessment of stress reactions following medical error incidents	Younger age and involvement in cases with severe patient harm were associated with higher acute stress levels (measured by IES-R). Although 72% of cases did not result in serious injury, physicians still reported significant stress. Institutional support reduced stress reactions.
Kazakhstan [26]	Examination of factors influencing physicians' job morale	Physicians reported vulnerability due to unclear legislation on medical errors and fear of criminal prosecution. Fear of becoming a criminal defendant undermined professional ethics, morale, and perceived job security. Reform of liability systems and improved insurance coverage were recommended.
United States [27]	Description of peer support group for physicians facing litigation	Physicians participating in structured peer-support programs after malpractice claims reported high levels of stress and MMSS symptoms, but significant emotional relief after intervention sessions. Preventive psychological support showed high acceptability and reduced negative emotional impact.
Netherlands/United States [28]	Survey of neurosurgeons regarding litigation impact	77% modified clinical practice after litigation exposure (58% toward defensive medicine). 39% frequently feared lawsuits. 81% had previously experienced claims. Fear of litigation and defensive behavior significantly correlated with intention to leave the profession.
Spain [4]	Evaluation of psychological impact of malpractice claims	56% of physicians experienced pronounced psychological reactions (anxiety, depression). 45% modified practice: increased documentation, ordered additional tests; 22% avoided "high-risk" patients; 19% avoided complex procedures. Psychological distress was strongly associated with defensive medicine.
Poland [29]	Narrative review of litigation stress syndrome	Authors described "medical litigation stress syndrome," characterized by anger, anxiety, guilt, insomnia, reduced self-esteem, and depressive symptoms similar to post-traumatic stress. Consequences included overdiagnosis, overtreatment, and early career exit. Social and legal support were emphasized as mitigation strategies.
Turkey [30]	Assessment of physicians' fear of litigation and defensive medicine	99% of physicians considered professional liability insurance necessary. Fear of litigation was high, defensive medicine moderate. 72.6% avoided "difficult" patients. Greater fear was weakly but positively associated with defensive practice.
Taiwan [31]	Qualitative study on physicians' fear of malpractice claims	Two major fear domains were identified: (1) negative consequences such as litigation, confrontation, reputational damage, psychological stress; (2) systemic risk factors including clinical uncertainty, workload, healthcare

		system constraints, and weakened physician–patient relationships. Authors recommended legal reform and structured psychological support.
India [32]	Survey of physicians' knowledge regarding liability and insurance	Experience influenced awareness: 90% of consultants (>10 years experience) held insurance policies, compared to approximately 35% with basic insurance knowledge among less experienced physicians. Only half of residents were aware of liability coverage. Authors recommended integrating insurance education into medical training.
Italy [33]	Determinants of defensive medicine among psychiatrists	60% of Italian psychiatrists reported practicing defensive medicine. The strongest predictor was adherence to clinical guidelines as protection against litigation risk (OR = 3.62). Greater experience reduced defensive practice. Authors advocated balanced risk-management culture.
Australia [34]	Qualitative study of drivers of defensive medicine	All participating physicians acknowledged defensive medicine as problematic. Key drivers included fear of legal and professional accountability, insufficient legal knowledge, and fear of criticism by colleagues or patients. In some cases, peer criticism was a stronger driver than litigation itself.
Germany [35]	Survey of general practitioners on fear of litigation	Approximately half reported significant fear of legal consequences. 63% believed adherence to clinical guidelines reduces litigation risk; 98% stated defensive medicine increases healthcare costs. Defensive practices were widespread and motivated by fear of errors and claims.

The international evidence summarized in Table 1 shows a consistent cross-national pattern: malpractice exposure and fear of litigation are strongly related to the negative psychological outcomes among physicians, regardless of differences in legal systems or insurance structures. Emotional distress, burnout, anxiety, and defensive medical behavior repeatedly appear across wide range of healthcare contexts, including both high-income and transitional systems.

Importantly, while professional liability insurance is widely perceived as necessary- particularly in Turkey and India, its presence does not remove psychological burden. Even in systems with more developed insurance mechanisms (United States, Germany, Spain), physicians continue to report persistent litigation-related stress and behavioral modifications. The evidence suggests that insurance reduce financial risk but does not fully address reputational anxiety, professional identity threats, or fear of criminal accountability.

Across studies, defensive medicine emerges as a mediating behavioral outcome linking litigation fear to broader system-level consequences, including increased

healthcare costs and potential workforce attrition. These findings underscore the need to conceptualize professional liability reform not solely as a financial instrument, but as a component of a broader psychosocial safety framework within healthcare systems.

In the context of Kazakhstan, these findings should be interpreted in light of recent health system reforms. More than 13,500 complaints are filed annually with the Social Health Insurance Fund (approximately 98% related to quality and accessibility of care), alongside over 7,000 complaints submitted to the Ministry of Health. Although a compulsory professional liability insurance system has been introduced, covering approximately 155,000 healthcare professionals, several systemic limitations persist, including a substantial administrative burden (requiring up to 13 documents to confirm an insured event) and relatively limited compensation amounts. These structural factors may contribute to sustained perceptions of legal vulnerability and reinforce professional stress and defensive medical practices among physicians [36].

3. Conclusion

The international empirical evidence reviewed in this study shows that malpractice risk and fear of professional liability are important and long-lasting factors of physicians' adverse mental health outcomes, regardless of national income level or the specific liability insurance model. Exposure to malpractice claims-or even sustained anticipation of potential complaints-is

consistently related to the higher levels of burnout, anxiety and depressive symptoms, reduced health-related quality of life, and increased use of defensive medical practices. Professional liability insurance contributes to reducing physicians' financial vulnerability and supports patient compensation mechanisms. However, financial coverage alone does not

reliably relieve the psycho-emotional burden related to legal scrutiny, reputational threats, and the possibility of criminal prosecution. In transitional health systems, including Kazakhstan, ambiguity in legal standards and the concurrent presence of civil and criminal liability may intensify physicians' perceived insecurity and occupational stress. International experience suggests that the most effective way to reduce these risks is through comprehensive, combining insurance mechanisms with legal clarity, transparent compensation pathways, institutional peer support, and structured mental health interventions for healthcare professionals. In this context, Kazakhstan's introduction of compulsory professional liability insurance should be regarded as a necessary but insufficient policy measure that requires

systematic evaluation of its long-term impact on physicians' psychological safety and professional sustainability and should be complemented by legal and organizational support reforms.

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References

1. Tlembayeva, Z. U. (2025). Strakhovanie professional'noy otvetstvennosti meditsinskikh rabotnikov kak mekhanizm zashchity prava na okhranu zdorov'ya (Professional liability insurance of medical workers as a mechanism for protecting the right to health care) [in Russian]. *Vestnik Instituta zakonodatel'stva i pravovoi informatsii Respubliki Kazakhstan*, 80(3), 317–326. https://doi.org/10.52026/2788-5291_2025_80_3_317
2. Rotenstein, L. S., Torre, M., Ramos, M. A., Rosales, R. C., Guille, C., Sen, S., & Mata, D. A. (2018). Prevalence of burnout among physicians: A systematic review. *JAMA*, 320(11), 1131–1150. <https://doi.org/10.1001/jama.2018.12777>
3. Liang, F., Hu, S., & Guo, Y. (2022). The association between fear of malpractice and burnout among Chinese medical workers: The mediating role of legal consciousness. *BMC Psychiatry*, 22, Article 358. <https://doi.org/10.1186/s12888-022-04009-8>
4. Vizcaíno-Rakosnik, M., Martín-Fumadó, C., Arimany-Manso, J., & Gómez-Durán, E. L. (2022). The impact of malpractice claims on physicians' well-being and practice. *Journal of Patient Safety*, 18(1), 46–51. <https://doi.org/10.1097/PTS.0000000000000800>
5. Zheng, J., Lu, Y., Li, W., Zhu, B., Yang, F., & Shen, J. (2023). Prevalence and determinants of defensive medicine among physicians: A systematic review and meta-analysis. *International Journal for Quality in Health Care*, 35(4), Article mzad096. <https://doi.org/10.1093/intqhc/mzad096>
6. Balch, C. M., Oreskovich, M. R., Dyrbye, L. N., Colaiano, J. M., Satele, D. V., Sloan, J. A., & Shanafelt, T. D. (2011). Personal consequences of malpractice lawsuits on American surgeons. *Journal of the American College of Surgeons*, 213(5), 657–667. <https://doi.org/10.1016/j.jamcollsurg.2011.08.005>
7. Tan, E. C., & Chen, D. R. (2019). Second victim: Malpractice disputes and quality of life among primary care physicians. *Journal of the Formosan Medical Association*, 118(2), 619–627. <https://doi.org/10.1016/j.jfma.2018.07.012>
8. Kursiv Media. (2024, April 4). "They don't provide medicines and violate ethics": What complaints do Kazakhstanis file against doctors to the Ministry of Health? <https://kz.kursiv.media/2024-04-04/ne-dayut-lekarstva-i-narushayut-etiku-s-kakimi-zhalobami-na-vrachej-kazahstancy-obrashhayutsya-v-minzdrav>
9. Social Health Insurance Fund. (n.d.). "The fund is accountable to everyone": Interview with Abylkair Skakov, Chairman of the Board of the Social Health Insurance Fund. <https://msqory.kz/ru/eshche/press-tsentr/smi-o-nas/stati/fond-podotchet-vsem-intervyu-predsedatelya-pravleniya-fsms-abylkaira-skakova/>
10. Social Health Insurance Fund. (n.d.). The number of patient complaints decreased by 11.7%. <https://msqory.kz/ru/eshche/press-tsentr/novosti/na-11-7-sokratilos-kolichestvo-zhalob-patsientov/>
11. Dirvar, F., Uzun Dirvar, S., Kaygusuz, M. A., Evren, B., & Öztürk, İ. (2021). Effect of malpractice claims on orthopedic and traumatology physicians in Turkey: A survey study. *Acta Orthopaedica et Traumatologica Turcica*, 55(2), 171–176.
12. Tan, E. C.-H., & Chen, D.-R. (2019). Second victim: Malpractice disputes and quality of life among primary care physicians. *Journal of the Formosan Medical Association*, 118(2), 619–627. <https://doi.org/10.1016/j.jfma.2018.07.012>

13. Gómez-Durán, E. L., Vizcaíno-Rakosnik, M., Martín-Fumadó, C., Klamburg, J., Padrós-Selma, J., & Arimany-Manso, J. (2018). Physicians as second victims after a malpractice claim: An important issue in need of attention. *Journal of Healthcare Quality Research*, 33(5), 284–289. <https://doi.org/10.1016/j.jhqr.2018.06.002>
14. Studdert, D. M., Mello, M. M., Sage, W. M., DesRoches, C. M., Peugh, J., Zapert, K., & Brennan, T. A. (2005). Defensive medicine among high-risk specialist physicians in a volatile malpractice environment. *JAMA*, 293(21), 2609–2617. <https://doi.org/10.1001/jama.293.21.2609>
15. Nahed, B. V., Babu, M. A., Smith, T. R., & Heary, R. F. (2012). Malpractice liability and defensive medicine: A national survey of neurosurgeons. *PLoS ONE*, 7(6), Article e39237. <https://doi.org/10.1371/journal.pone.0039237>
16. Agarwal, R., Gupta, A., & Gupta, S. (2019). The impact of tort reform on defensive medicine, quality of care, and physician supply: A systematic review. *Health Services Research*, 54(4), 851–859. <https://doi.org/10.1111/1475-6773.13157>
17. Vandersteegen, T., Marneffe, W., Cleemput, I., & Vereeck, L. (2015). The impact of no-fault compensation on health care expenditures: An empirical study of OECD countries. *Health Policy*, 119(3), 367–374. <https://doi.org/10.1016/j.healthpol.2014.09.010>
18. Zavrazhskiy, A. V. (2022). *Improvement of the system of liability insurance in medical practice* (Doctoral dissertation, Saint Petersburg State University of Economics).
19. VSPRU.ru. (2023, November 9). *Analytics on mandatory insurance of medical workers: Expert opinions and implementation challenges*. <https://vspru.ru/kommunikatsii/media/news/2023/11/09112023-na-vsiakiy-neschastnyy-strakhovanie-otvetstvennosti-vracha-realnaia-zashchita-vs-nalog-s-klinik/>
20. Sabitova, A., Hickling, L. M., Toleubayev, M., Jovanovic, N., & Priebe, S. (2022). Job morale of physicians and dentists in Kazakhstan: A qualitative study. *BMC Health Services Research*, 22, Article 1508. <https://doi.org/10.1186/s12913-022-08919-x>
21. Criminal Code of the Republic of Kazakhstan. (2014). *Code of the Republic of Kazakhstan dated July 3, 2014 No. 226-V ZRK*. <https://adilet.zan.kz/rus/docs/K1400000226>
22. Tokayev, K.-J. (2020, May 27). *Address by the Head of State Kassym-Jomart Tokayev at the Third Meeting of the National Council of Public Trust*. President of the Republic of Kazakhstan. https://www.akorda.kz/ru/speeches/internal_political_affairs/in_speeches_and_addresses/vystuplenie-glavy-gosudarstva-ktokaeva-na-tretem-zasedanii-natsionalnogo-soveta-obshchestvennogo-doveriya
23. Kratenko, M. V. (2023). Limits of criminalization of medical errors: Approaches in Russian and foreign law. *Journal of Russian Law*, 27(7), 119–132. <https://doi.org/10.12737/jrp.2023.083>
24. Madan, R., Das, N., Patley, R., Nagpal, N., Malik, Y., & Math, S. B. (2024). Consequences of medical negligence and litigations on health care providers: A narrative review. *Indian Journal of Psychiatry*, 66(4), 317–325. https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry_799_23
25. Tsai, S.-F., Wu, C.-L., Ho, Y.-Y., Lin, P.-Y., Yao, A.-C., Yah, Y.-H., Hsiao, C.-M., You, Y.-H., Yeh, T.-F., & Chen, C.-H. (2023). Medical malpractice in hospitals – How healthcare staff feel. *Frontiers in Public Health*, 11, Article 1080525. <https://doi.org/10.3389/fpubh.2023.1080525>
26. Sabitova, A., Hickling, L. M., Toleubayev, M., Jovanovic, N., & Priebe, S. (2022). Job morale of physicians and dentists in Kazakhstan: A qualitative study. *BMC Health Services Research*, 22, Article 1508. <https://doi.org/10.1186/s12913-022-08919-x>
27. Doehring, M. C., Strachan, C. C., Haut, L., Heniff, M., Crevier, K., Crittendon, M., Nault Connors, J., & Welch, J. L. (2023). Establishing a novel group-based litigation peer support program to promote wellness for physicians involved in medical malpractice lawsuits. *Clinical Practice and Cases in Emergency Medicine*, 7(4), 205–209. <https://doi.org/10.5811/cpcem.1377>
28. Gadjradj, P. S., Ghobrial, J. B., & Harhangi, B. S. (2020). Experiences of neurological surgeons with malpractice lawsuits. *Neurosurgical Focus*, 49(5), Article E3. <https://doi.org/10.3171/2020.8.FOCUS20250>
29. Kruczaj, K., Krawczyk, E., & Piegza, M. (2023). Zespół stresu związanego z błędem medycznym w teorii i praktyce – przegląd narracyjny (Medical malpractice stress syndrome in theory and practice: A narrative review) [in Russian]. *Medycyna Pracy*, 74(6), 513–526. <https://doi.org/10.13075/mp.5893.01425>
30. Özdemir, R. C., Işık, M. T., Aslan, A., & Ayaz, M. (2024). Factors affecting physician fear of malpractice and defensive medicine practices: A cross-sectional study. *Journal of Academic Research in Medicine*, 14(2), 77–83. <https://doi.org/10.4274/jarem.galenos.2024.52386>

31. Tsai, Y.-L. (2023). Does the medical accident prevention and dispute resolution act respond to physicians' fear? Examining the nature of fear of medical malpractice disputes among hospital-employed physicians in Taiwan. *Tungs' Medical Journal*, 17(2), 57–66. <https://doi.org/10.4103/ETMJ.ETMJ-D-23-00014>
32. Gadhe, S., Kale, S., Chalak, A., Vatkar, A. J., Doshi, S. S., & Dey, J. K. (2023). Professional indemnity/medical malpractice insurance—Awareness among medical students and consultants of India: An online survey study. *MGM Journal of Medical Sciences*, 10(1), 38–42. https://doi.org/10.4103/mgmj.mgmj_4_23
33. Morena, D., Di Fazio, N., Scognamiglio, P., Delogu, G., Baldari, B., Cipolloni, L., Frati, P., & Fineschi, V. (2023). Predictors of defensive practices among Italian psychiatrists: Additional findings from a national survey. *Medicina*, 59(11), Article 1928. <https://doi.org/10.3390/medicina59111928>
34. Ries, N. M., Johnston, B., & Jansen, J. (2022). A qualitative interview study of Australian physicians on defensive practice and low value care: "It's easier to talk about our fear of lawyers than to talk about our fear of looking bad in front of each other." *BMC Medical Ethics*, 23, Article 16. <https://doi.org/10.1186/s12910-022-00755-2>
35. Goetz, K., Oldenburg, D., Strobel, C. J., et al. (2024). The influence of fears of perceived legal consequences on general practitioners' practice in relation to defensive medicine – A cross-sectional survey in Germany. *BMC Primary Care*, 25, Article 23. <https://doi.org/10.1186/s12875-024-02267-x>
36. Tlembayeva, Z. U., & Akhmetoldinova, N. Q. (2025). Problems and prospects of implementing legal protection for medical professionals through professional liability insurance. *Journal of Health Development*, 60(3), Article jhd008. <https://doi.org/10.32921/2663-1776-2025-60-3-jhd008>
37. OpenAI. (2025). *ChatGPT (large language model)* [Computer software]. <https://chat.openai.com>

Дәрігерлердің кәсіби жауапкершілігін сақтандырудың олардың психикалық денсаулығына әсері: Халықаралық тәжірибе және Қазақстан үшін саясаттық ұсыныстар

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Түйіндеме

Кіріспе. Кәсіби жауапкершілікті сақтандыру заманауи денсаулық сақтау жүйелерінде пациенттерге келтірілген зиян үшін қаржылық өтемақыны қамтамасыз етуге және дәрігерлерді медициналық қателіктердің экономикалық салдарынан қорғауға бағытталған маңызды реттеуші құрал болып табылады. Алайда бұл институттың тек қаржылық және құқықтық қана емес, сонымен қатар психоәлеуметтік аспектілері де бар. Халықаралық зерттеулер дәрігерлердің сот дауларына тартылу қаупі, құқықтық осалдық сезімі және кәсіби қызметке байланысты шағымдар олардың эмоционалдық күйзелісіне, мазасыздық деңгейінің артуына, депрессивті белгілердің дамуына және қорғаныш медицина тәжірибесінің таралуына әкелуі мүмкін екенін көрсетеді. Көптеген дәрігерлер сақтандыру төлемдері қаржылық шығындарды өтеген жағдайда да, сот процесі кезінде және одан кейін психологиялық қысымның сақталатынын атап өтеді. АҚШ, Еуропа, Азия және Австралия елдерінде жүргізілген зерттеулер соттық тәуекелдер дәрігерлердің кәсіби қанағаттануына, клиникалық шешім қабылдауына және кадр тұрақтылығына әсер ететінін дәлелдейді. Міндетті сақтандыру жүйесі бар елдерде қаржылық қауіпсіздік белгілі бір дәрежеде қамтамасыз етілгенімен, құқықтық тексерулер мен беделдік тәуекелдерден туындайтын психологиялық жүктеме сақталуы мүмкін. Өтпелі денсаулық сақтау жүйелері бар мемлекеттерде, оның ішінде Орталық Азия елдерінде, құқықтық нормалардың айқын болмауы және қылмыстық жауапкершілік қаупі дәрігерлердің кәсіби күйзелісін күшейтуі ықтимал. Бұл шолу 2015–2025 жылдар аралығында жарияланған халықаралық ғылыми деректерді талдай отырып, кәсіби жауапкершілікті сақтандыру, соттық тәуекелдер, кәсіби күйіп кету, қорғаныш медицина және кадрлық тұрақтылық арасындағы байланысты бағалайды. Зерттеу нәтижелері сақтандыру жүйесінің қаржылық қорғау функциясы бар болғанымен, ол дәрігерлердің психоэмоционалдық жүктемесін автоматты түрде азайтпайтынын көрсетеді.

Тиімді шешімдер құқықтық реформаларды, институционалдық қолдау тетіктерін және медицина қызметкерлерінің психикалық денсаулығын қорғауға бағытталған кешенді шараларды қамтуы тиіс.

Түйін сөздер: кәсіби жауапкершілікті сақтандыру, медициналық қателік, дәрігерлер, кәсіби күйіп кету, психологиялық стресс, психикалық денсаулық, денсаулық сақтау саясаты, еңбек стресі.

Влияние страхования профессиональной ответственности на психическое здоровье врачей: Международный опыт и политические импликации для Казахстана

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Резюме

Введение. Страхование профессиональной ответственности является ключевым регуляторным механизмом современных систем здравоохранения, направленным на обеспечение финансовой компенсации пациентам и защите врачей от экономических последствий медицинских ошибок. Однако помимо финансово-правового аспекта данный институт имеет выраженное психосоциальное измерение. Международные исследования демонстрируют, что риск судебных разбирательств, ощущение юридической уязвимости и участие в процессах по делам о врачебной ошибке ассоциируются с повышением уровня эмоционального выгорания, тревожности и депрессивных симптомов у медицинских работников. Даже при наличии страхового покрытия судебные процессы сопровождаются значительным психологическим напряжением, влияющим на профессиональное самочувствие врачей. Исследования, проведенные в странах Северной Америки, Европы, Азии и Австралии, подтверждают связь между судебными рисками и развитием оборонительной медицины, снижением удовлетворенности трудом и намерением покинуть профессию. В странах с обязательной системой страхования финансовая защита частично снижает экономическую неопределенность, однако психологическая нагрузка, связанная с репутационными рисками и институциональным контролем, сохраняется. В государствах с переходной системой здравоохранения, включая страны Центральной Азии, недостаточная определенность правовых норм и возможность уголовного преследования усиливают чувство профессиональной незащищенности. Настоящий обзор обобщает международные данные 2015–2025 годов о влиянии страхования профессиональной ответственности и судебных рисков на психическое состояние врачей, практику оборонительной медицины и кадровую устойчивость системы здравоохранения. Полученные результаты свидетельствуют о том, что страхование выполняет важную финансовую функцию, однако не гарантирует снижения психоэмоциональной нагрузки. Для эффективной защиты медицинских работников необходим комплексный подход, включающий правовые реформы, институциональные механизмы поддержки и программы охраны психического здоровья.

Ключевые слова: страхование профессиональной ответственности, врачебная ошибка, врачи, профессиональное выгорание, психологический стресс, психическое здоровье, политика здравоохранения, профессиональный стресс.