



ORIGINAL ARTICLE

Medicine Science 2025;14(4):996-1000

Causation in criminal proceedings in medical malpractice claims in the light of high court decisions

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Received 12 June 2025; Accepted 18 July 2025

Available online 06 October 2025 with doi: 10.5455/medscience.2025.06.156

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Abstract

In order for criminal or legal liability to occur, it is necessary that there be a causal link between the unlawful act and the result. Since causality can sometimes be very broad, many causality theories have been created to narrow down liability. This study aims to review the Court of Cassation decisions in Türkiye concerning causation in criminal proceedings in medical malpractice cases, to illustrate how expert reports are interpreted by legal professionals, and to analyze the causation approach accepted by the high court, thereby offering a method to guide medical experts in Türkiye. Court of Cassation's decisions cases were scanned via <https://www.sinerjimevzuat.com.tr/>, <https://karararama.yargitay.gov.tr/>. 119 decisions of the 12th Criminal Chamber of Court of Cassation between 01.01.2012 and 31.12.2023, were included in the study. Statistical evaluation was made with the "Statistical Package for Social Science for Windows 28.0" program. In 52.10% (n=62), experts expressed the opinion that "even if appropriate treatment was given, it isn't certain to prevent the outcome." In 53 (85.48%) of these 62, 12th Criminal Chamber of Court of Cassation decided that causality couldn't be determined with certainty so the medical staff couldn't be responsible for death or injury. In 77 (65.71%), despite the lack of causality, 12th Criminal Chamber of Court of Cassation was of the opinion that health professionals who are also public officials should be punished for "neglect of duty" (TPC 257/2). Experts' preparation of their reports in accordance with the rules determined in international guidelines will ensure that responsibility is determined correctly. Therefore, in every medical malpractice report prepared by experts, there must be an evaluation based on scientific probabilities regarding the causality between the detected error and the resulting damage. Legal evaluation of expressed scientific possibility is within the jurisdiction of the judge.

Keywords: Malpractice, causality, criminal law

Introduction

Causation generally refers to the relationship between cause and effect. In both criminal and civil law, for liability to arise, there must be a causal link between the unlawful act and the resulting harm. Since causation can sometimes be overly broad, numerous causation theories have been developed in order to narrow the scope of criminal and civil liability [1].

Medical malpractice is described in various ways but the World Medical Association defines it as the physician's failure to

conform to the standard of care for treatment of the patient's condition, or a lack of skill, or negligence in providing care to the patient, which is the direct cause of an injury to the patient [2]. These various descriptions share a common point: there must be a causal relationship between the wrongful act/negligence and the damage. This means that causation is essential for the determination of responsibility.

In many countries, lawsuits related to medical malpractice are predominantly compensation claims. Accordingly, much of the

CITATION

Aksoy EM, Yukseloglu EH, Akay A, et al. Causation in Criminal Proceedings in Medical Malpractice Claims in The Light of High Court Decisions. Med Science. 2025;14(4):996-1000.



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English-language literature focuses on causation in civil liability [3]. In these civil cases, the “balance of probabilities” principle is frequently discussed. According to this, if the probability that the wrongful act affected the outcome is greater than the probability that it did not, causation is considered established [4-7]. Criminal cases, on the other hand, are also seen outside of Türkiye, in countries such as Japan, New Zealand, Saudi Arabia, India, and Taiwan [8, 9]. Also, it is noted that criminal cases involving medical malpractice are also increasing in the United States [10]. As criminal cases rise, the evaluation of causation in these cases becomes a topic of discussion [11,12].

Numerous theories regarding the concept of causation in criminal law have been developed by legal scholars [13]. Criminal law considers causation from a natural sciences perspective when determining the principles of liability. This relationship is determined based on life experiences and logical reasoning. Issues that can be resolved through general knowledge fall within the jurisdiction of the judge or prosecutor. Therefore, the existence of causation in its natural sense is determined by legal professionals. However, in most cases, identifying causation requires expertise and technical knowledge, necessitating expert opinion [14,15].

In particular, the effect of medical practices on the resulting harm in the patient continues to be a controversial issue in medical expert evaluations, and no consensus has been reached among experts. Some guiding methods have been proposed in this regard [16].

There is an international guide that proposes criteria experts should follow when evaluating medical malpractice. This guide recommends that experts report on the impact of the malpractice on the outcome using criterion on scientific probability [17]. According to the experts’ evaluation of probabilities, the court has the duty to determine causation. Various legal systems have differing practices regarding the legal determination of causation [12]. Sometimes, the decisions of the high courts in Türkiye also appear to be inconsistent.

In Türkiye, the 12th Criminal Chamber of the Court of Cassation (12CC) handles medical malpractice cases. When the local court does not comply with a reversal decision of the Court of Cassation, the case is reviewed by the General Assembly of Criminal Chambers, which includes all criminal chambers. The decisions of the General Assembly on these matters are considered case-law. There are two such precedent decisions regarding medical malpractice. These decisions state that, for healthcare professionals to be held responsible for a death, there must be certain causation between the medical error and the death.

This study aims to review the high court decisions in Türkiye concerning causation in criminal proceedings in medical malpractice cases, to illustrate how expert reports are interpreted by legal professionals, and to analyze the causation approach accepted by the high court, thereby offering a method to guide

medical experts in Türkiye.

Material and Methods

In this study, high court decisions regarding criminal cases were searched using the keywords “malpractice,” “medical error,” “causation,” “causal link,” “doctor,” “physician,” “medical practitioner,” “dr,” “nurse,” “midwife,” and “healthcare personnel” on the websites <https://www.sinerjimevzuat.com.tr/> and <https://karararama.yargitay.gov.tr/>. A total of 356 decisions dated between 01.01.2012 and 31.12.2023 were found. Of these, 237 decisions that lacked expert opinions or did not include a causation assessment were excluded from the study. A total of 119 decisions of the 12CC that involved errors identified in one stage of medical practice and discussions on whether there was a causal link between the identified error and the harmful outcome were included.

Expert opinions, local court decisions, and the 12CC’s views on causation were examined. In all of the reviewed decisions, deviations from scientific standards in one stage of medical practice had been identified by experts. The views on the assessment of the causal link between the deviation and the harm were analyzed. Expert, local court, and 12CC opinions were evaluated. All collected data were coded and recorded using Microsoft Office Excel 365. Statistical evaluations were conducted using Statistical Package for Social Sciences (SPSS) for Windows 28.0.

Ethics

The data used in the study titled “Causation in Criminal Proceedings in Medical Malpractice Claims in the Light of High Court Decisions” are publicly accessible, non-personal decisions issued by the Court of Cassation. Due to the public availability of the data, ethical committee approval was unnecessary for this study, and the study was conducted in accordance with ethical standards.

Result

In the study, 356 decisions were reviewed. Among the 119 cases where the issue of causation was discussed, the opinions of the local court, the Court of Cassation, and the experts were examined. In all 119 cases, the expert reports identified a deviation from scientific standards in at least one stage of the medical practice. The legal decisions based on the expert opinions on causation are presented in Table 1.

In 62 (52.10%) of all cases, the experts reported that “even if the appropriate intervention had been performed, the outcome would not have been certainly prevented.” Among these cases, local courts established causation in 31 (50%) and did not in the other 31 (50%). However, the 12CC ruled in 53 of these 62 cases (85.48%) that causation could not be definitively established, hence the healthcare professionals could not be held responsible for negligent homicide or injury. In 4 cases (6.45%), the 12CC ordered further investigation into causation. In the remaining 5 cases (8.06%), the 12CC argued that the expression “not certainly preventable” does not preclude the establishment of causation.

In three cases where the phrase "not certainly preventable" was used in the expert opinion, additional qualifications were also included. In one case where the report stated that "the degree of impact of the medical error on death is 1/8," the 12CC concluded that no causation could be assumed. In another where the report stated "the physician's share in the death is 2/8," the 12CC ordered a new expert report. In a third, which reported "even with proper treatment, mortality in such neonates is around 5%," the 12CC accepted the existence of causation.

In the 24 (20.17%) cases lacking any causation opinion in the expert report, the local court accepted causation in 21 (87.5%) and denied it in 3 (12.5%). Of these, the 12CC accepted causation in 14 (58.33%), called for a new expert report in 6 (25%), and rejected causation in 4 (16.67%). In 13 of these cases (54.17%), the 12CC agreed with the local court on causation.

In the 10 cases (8.4%) where the expert explicitly stated the existence of causation, both the local court and the 12CC found causation and issued verdicts accordingly for negligent homicide or injury.

Among the 8 cases where the expert stated there was no causation, the local court found causation in 3 (37.5%)

and ruled accordingly. However, the 12CC reversed all three, stating that causation was not established.

In 9 cases where the expert stated that causation could not be determined, the local court accepted causation and ruled for negligence in 5 (55.56%). The 12CC, however, found no causation in 8 cases (88.89%) and accepted causation in only 1 case (11.11%).

In 2 cases where the expert stated that the medical error had an effect on the outcome without specifying a degree, both the local court and the 12CC accepted causation. In 4 cases where the expert stated the error did not result in harm, the 12CC ruled that it was inappropriate to impose criminal liability for negligence.

Of the 119 cases examined, in 77 (65.71%) the 12CC concluded that due to the absence of causation, a conviction for negligent homicide or injury was not possible, but that health professionals acting as public officials should be convicted under Turkish Penal Code Article 257/2. In 32 cases (26.89%), the 12CC found causation and upheld convictions for negligent homicide or injury. In 10 cases (8.40%), the 12CC reversed the decision and ordered new expert evaluations to determine causation.

Table 1. The legal decisions based on the expert opinions on causation

Expert Opinion	Local Court		12CC		Undetermined
	C+	C-	C+	C-	
"Outcome not certainly preventable" (n=62)	31 (50%)	C-	5 (8.06%)	53 (85.48%)	4 (6.45%)
"Causation present" (n=10)	10 (100%)	31 (50%)	10 (100%)	0	0
"Causation indeterminable" (n=9)	5 (55.56%)	0	1 (11.11%)	8 (88.89%)	0
"No causation" (n=8)	3 (33.75%)	4 (44.44%)	0	8 (100%)	0
"No harm from error" (n=4)	1 (25%)	5 (66.25%)	0	4 (100%)	0
"Effect on outcome" (n=2)	2 (100%)	3 (75%)	2 (100%)	0	0
No opinion on causation (n=24)	21 (87.5%)	0	14 (58.33%)	4 (16.67%)	6 (25%)
Total=119					

12CC: 12th Criminal Chamber of the Court of Cassation, C+: Causation established, C-: Causation denied

Discussion

In 85.48% of the cases where experts expressed the opinion that "even if the appropriate intervention had been carried out, the outcome would not have been certainly prevented," the 12CC ruled that causation could not be established. These rulings are consistent with the precedent-setting decisions of the General Assembly of Criminal Chambers. In criminal proceedings in Türkiye, in order for a causal link to be accepted between a medical error and a harmful outcome, certainty is sought. Similar perspectives can be found in other countries. For instance, the High Court of Brussels ruled that a physician could not be held responsible for a death because definitive causation could not be established, despite a 90% chance of survival with proper treatment [12].

In three of the reviewed cases, the expert report quantified the impact of the error on the outcome. In one, where the expert

stated "the impact of the medical error on death was 1/8," the 12CC overturned the local court's conviction for negligent homicide, stating causation could not be definitively established. In another, where the fault rate was reported as "2/8," the conviction was reversed for insufficient causation analysis. In a case where the expert report stated that "even with appropriate treatment, mortality in such cases is around 5%," the local court's decision to accept causation and convict for negligent homicide was upheld by the 12CC. These rulings suggest that a 95% survival probability is interpreted as proof of causation beyond reasonable doubt.

In 87.5% of the 24 cases where the expert report did not include a causation opinion, the local court found causation. In 58.33% of these, the 12CC also accepted the existence of a causal link. This finding highlights the importance of explicitly addressing causation in expert reports. International guidelines on medical malpractice similarly recommend that experts assess causation

and report the impact of the medical error on the outcome [17].

In the 10 cases (8.4%) where experts stated causation existed, both the local court and the 12CC found causation and rendered consistent verdicts. In contrast, in 3 of the 8 cases where the expert stated there was no causation, the local court found otherwise and ruled accordingly, but all of these were reversed by the 12CC. In 2 cases where the expert simply noted an effect of the error without grading it, both courts accepted the causal link. In 4 cases where the expert concluded the error did not lead to harm, the 12CC ruled that the conditions for negligent injury were not met.

Causation in medical malpractice involves hypothetical reasoning. It is often based on scenarios that did not actually occur. For example, in a case where a patient with internal bleeding from generalized trauma was discharged prematurely and later died, it is scientifically impossible to state with certainty whether the patient would have survived with proper care. Only probabilities of survival or death under appropriate treatment can be discussed. Indeed, the guide by Ferrara et al. emphasizes the need to assess causation based on probability [17]. Thus, aside from clearly defined cases, phrases like "causation exists," "no causation," or "effect present" should be avoided by experts, as they are not scientifically rigorous and may mislead the courts. However, in off-label procedures where all complications stem from an unindicated intervention, causation can be definitively established.

In the 9 cases where experts concluded that causation could not be determined, the 12CC ruled in 8 (88.89%) that causation could not be established, but accepted causation in 1 (11.11%) case. This finding confirms that while expert opinion is a valuable tool in assessing causation, courts are not bound by it and make independent determinations.

Definitions from organizations such as the World Medical Association and the Turkish Medical Association state that harm must be present for a case to be considered malpractice [1]. Many well-known court cases also show that where causation is not established, no liability arises [12]. However, in Türkiye, even if causation between the harm and the error is not established, healthcare professionals found to be at fault may still be convicted under Article 257/2 of the Turkish Penal Code which is named as "Misuse of Public Duty" due to their status as public officials. In contrary, healthcare professionals working in private hospitals cannot be liable for this crime, because they are not accepted as public officials.

Conclusion

In lawsuits alleging medical malpractice, it is inevitable that judicial authorities will need to consult experts on matters requiring specialized and technical knowledge. However, as shown in this study, experts may use differing expressions. Differences in expert reporting styles for similar cases can lead to inconsistent court rulings. Therefore, it is crucial that a common

language be developed between medical experts and judicial authorities, and a consensus be established on how to express the extent to which the lack of or improperly performed medical interventions contributed to the harm sustained by the patient. Such efforts are essential for ensuring fair and accurate judicial decisions.

This study reveals that in practice, no concrete, measurable, and clearly defined criteria exist for evaluating causation in medical malpractice lawsuits—either among experts, local courts, or even across different high court chambers. This situation leads to prolonged proceedings and divergent rulings on similar matters.

Retrospective studies based on Court of Cassation decisions up to now have mostly focused on findings such as medical specialty, type of error, and error rates [18–21]. This study is the first to examine how causation is evaluated. It is evident that expert opinion serves as a tool in determining causation. Since causation is often hypothetical, it is unlikely that experts can offer definitive conclusions. Experts should instead provide probabilities. It is the judiciary's role to evaluate these probabilities and decide whether a causal link exists.

To improve the assessment of medical malpractice cases, it would be highly beneficial to develop a national guide with the participation of all relevant stakeholders. Such a guide would assist experts in standardizing their reports.

Limitations

The number of decisions retrieved via search engines is likely lower than the actual number of decisions made by the relevant chamber of the Court of Cassation during the specified period. This study includes only publicly available decisions accessible via search engines, not the entirety of decisions issued by the Court of Cassation.

Conflict of Interests

The authors declare that there is no conflict of interest in the study.

Financial Disclosure

The authors declare that they have received no financial support for the study.

Ethical Approval

Due to the public availability of the data, ethical committee approval was unnecessary for this study, and the study was conducted in accordance with ethical standards.

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