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# MEDICAL LIABILITY FOR MISSING THE OPPORTUNITY FOR A PATIENT'S RECOVERY OR SURVIVAL IN JORDANIAN LEGISLATION: AN ANALYTICAL LEGAL STUDY

**Dr. Suzan Mamdouh Al-Awaysheh[1], Dr. Naser Alsaraireh[2], Dr. Abdalelah Mohammed Smairan[3], Dr. Salah Mohammed Awaisheh[4], Dr. Sadam Mohammad Awaisheh[5], Dr. Wasfi Mahmoud Masoud Al-Khraisat[6]**

[1]Lawyer and Legal Advisor Independent Researcher Email: dr.suzanawaysheh@gmail.com
ORCID: https://orcid.org/0009-0009-4508-0757
[2]Assistant Professor of Public Law College of Business and Law, Royal University for Women Kingdom of Bahrain, Email: nalsaraireh@ruw.edu.bh, ORCID: https://orcid.org/0009-0005-3837-5427
[3]Assistant Professor of Public Law Faculty of Law, Al-Ahliyya Amman University Amman, Jordan
Email: asmairan@ammanu.edu.jo, ORCID: https://orcid.org/0000-0002-0900-7546
[4]Assistant Professor of Law Private Law Department, Faculty of Law Applied Science Private University
Amman, Jordan
[5]Assistant Professor of Administrative Law Public Law Department, Faculty of Law, Al-Ahliyya Amman University Amman, Jordan
[6]Assistant Professor of Administrative Law Public Law Department, Faculty of Law Al-Ahliyya Amman University Amman, Jordan Email: w.alkhraisat@ammanu.edu.jo, ORCID: https://orcid.org/0000-0002-4573-5129

## ABSTRACT
The issue of medical responsibility over the failure to provide a patient with a chance at recovery or survival can be considered a very acute legal and ethical matter in the modern healthcare industry. This research paper looks at the Jordanian legal framework on the issue of responsibility of physicians when the medical errors used do not directly lead to harm, but in any case, leaves the patients without a real and legitimate opportunity of recovery or survival. The analysis demonstrates the change in medical practice, which, although providing better care to patients, complicates the treatment processes and the risk of making mistakes. The study addresses the term of missed opportunity as understood in the jurisprudence and judicial theory, which makes the duty of a physician less to ensure certain medical results and more to follow due care and professional diligence. However, it becomes liable in cases where professional obligations, negligence, and omission of precautions that are supposed to be taken have been established. The consideration of damages is especially focused on, especially in the context of probabilities, where it is impossible to directly observe the causation of the harms on the patient by the action of the physician. It is through an analytical and descriptive methodology that this paper will review the pertinent Jordanian laws, such as the legal standards, the terms and conditions of establishing the damages, and judicial interpretations of missed opportunities. Jurisprudence trends are also presented in a way that gives comparative insight to better develop and improve the application of the law. These results highlight the fact that medical liability regarding missed opportunities is acknowledged under Jordanian law, and this has a consequence on civil compensation as well as professional responsibility. The research paper helps to understand the legal duties of physicians, inform policy-making, and practice judicial advice on protecting basic rights of life and health of patients..

**KEYWORDS:** Medical liability, Missed opportunity, Patient Recovery, Jordanian legislation, Civil Responsibility, Healthcare law, Medical Negligence, Legal Accountability

## GRAPHICAL ABSTRACT

## INTRODUCTION

Phenomena that are related to the human life are diseases and injuries, common or rare. Securing health care and coming up with treatment plans are some of the main concerns of human communities. Due to the high speed of scientific and technological development in the medical sphere, the role of the physician in the health care delivery has become more complicated and varied. Nonetheless, this evolution has also ensured the rise in the risk of medical errors that can cause extreme damage in case they are not addressed properly. Some of these mistakes include the failure to provide a patient with a chance to recover or survive. (1).

Legal and ethical ramifications of this issue are quite high, which is why it attracts the attention of the legislators, jurists, and legal researchers. It directly deals with the basic human rights such as the right to life and bodily safety. The juridical difficulty of such cases is where the negligence of a given physician does not directly lead to the death or failure of treatment but it leads to the loss of an actual and valid chance at recovery or survival, which is known in the jurisprudence and judicial theory as the "Missing Opportunity" rule (2).

Although this may be true to the general requirements of most laws as well as jurisprudential views, which stipulate that physicians must practice care, caution and meet the set of scientific and professional ideals, it does not imply that physicians are obligated to the attainment of a particular medical outcome. Nevertheless, it does not relieve them of accountability when a violation of the professional obligations or negligence to follow the accepted medical regulations is established, even the negligence of precautionary measures that are the very nature of their work ( Miss Opportunity as a Reason to Stand Responsibility, 2023).

In some situations, a physician has the responsibility of taking care of the patient against injury or death due to the use of medical equipment, machinery, or medications, despite this injury not being related to the underlying illness (3). The question of medical liability to omit an opportunity, therefore, creates a great legal problem: it is hard to find a legal basis of liability when it is unclear that a physician acted directly in the case of the patient death or failure of treatment, but denied a patient a real and genuine opportunity to survive or get better. This challenge is further exacerbated by the probability of causation and damage estimation of missed opportunities. (4).

Therefore, the present study will be based on the following key question: Does the Jordanian legislation acknowledge the medical liability in the context of the missed opportunity to save a patient or keep him/her alive, and in this case, what is the legal rationale behind the liability, and how the amount of resulting damages is to be compensated?

The objectives of the study are: to specify the concept of medical liability and its legal foundation in the Jordanian legislation, define the legal nature of the missed opportunities to recover or save the lives of patients, and determine the conditions of determining the damages under the missed opportunities, introduce the jurisprudential and judicial opinions in relation to compensation of such damages (5,6).

This paper takes the analytical methodology, looking at the legal documents that apply to medical liability in the Jordanian law and determine their relevance in situations where there are missed chances to save or rescue a patient. It also uses a descriptive method of introducing core legal principles and theory of missed opportunities, and a comparative method in dealing with the trends in judicial progress and judicial activity with the purpose of contributing to the analysis and enhancing the conclusions of the study in the context of the Jordanian law. (1).

### Definition of Medical Error in Missing the Opportunity for Recovery

Medical error can usually be described as a breach or failure of the physician to act in a manner that is within his or her reasonable capabilities of a reasonably competent physician under analogous circumstances (7). This definition has however been found to be criticized due to its limited scope as it limits medical error to those cases of negligence only which are just one of the aspects of medical malpractice. It does not cover other types of professional misconduct that can result in the denial of a patient to recover or survive (8).

In that light, medical error in the context of missing the opportunity to recover may be defined as the action of a physician, in terms of diagnosis, prescription of treatment or making a therapeutic decision as to how to address a patient, in such a way that infringes upon the accepted medical principles and the professional standards, and permanently denies the patient a legitimate and actual opportunity to recover or survive or in some cases, death. This kind of medical error is one of the most complicated types of medical liability as it is connected not with the ultimate damage but a loss of a chance that could have changed the medical outcome of the patient (2).

According to the Medical error, Jordanian law, in the Medical error and Health Liability Law No. (25) Of 2018, defines a medical error as an act, omission, or negligence by a healthcare provider, which is inconsistent with the ruling professional regulations on the working environment and leads to damage. This definition indicates the dependence of the Jordanian legislator upon the criterion of the existing professional medical regulations and defines an immediate connection between the medical error and the harm which is inflicted, placing the legal liability of any medical professional violation of the existing medical standards. Equally, the medical profession in France is governed by Article (62) of Law No. (83-11) regarding social insurance, which provides the professional requirements of physicians, in a structured legal system. This clause underlines the compliance of physicians to the set professional regulations as a primary measure of protection of the patient against damages caused by professional negligence or medical error, even those causing the loss of an opportunity to recover or survive (8).

### Loss of Chance of Recovery as a Principle in Medical Fault

Loss of chance of recovery (Loss of Chance) has been termed as one of the most prominent modern jurisprudential and legal advances in medical liability. This idea changes the emphasis of the ultimate damage to the missed

opportunity as such, which is itself a legal interest and is entitled to compensation. The damage caused by denying a patient a real and legitimate chance to advance their health condition, or to live is considered as an existing and real damage, not a possibility or a hypothesis of the future, and thus, is compensable damage (9,10(

Legal studies have made it clear that the lost opportunity is to be legitimate and serious in the sense that its loss is definite and final. Additionally, it is necessary to measure the worth of this harm not just in relation to the final outcome, but also in regards to the right of the patient to the possibility of treatment and health enhancement.

This doctrine is applicable to the situation of medical errors when it is known that the act or omission of a physician has led to the loss of a real opportunity to recover or improve the health condition of the patient, although the final harm is not direct or identifiable. In the recent researches, it was noted that this principle plays an important part in addressing the usual challenges linked to establishing the causal relationship between medical negligence and the eventual result. The doctrine of loss of chance is therefore a legal tool of compensating probabilistic damages that are hard to establish using conventional procedures of civil medical liability (11(

The Jordanian laws focus on the violation of existing professional rules of medicine and violations of professional responsiveness in case the violation leads to damaging the patient. The Jordanian Medical and Health Liability Law No. (25) of 2018, which regulates medical fault, states that such an act, omission, or negligence by a healthcare provider is inconsistent with the existing professional rules in the environment presented to the provider and causes harm (Article (2) of the Law.

This definition is the core foundation of civil liability of a physician as provided by the Jordanian law that it is based on the determination of fault, harm, and the causal relationship between the two and the fact that the physician has the duty to deliver the necessary scientific and professional standard of care (14)

The French law defines medical liability as a more general framework, which incorporates both civil liability and, in some instances, criminal liability in addition to the use of general compensation provisions under the French civil law (15(

In the French system of law, the duty of the physician to take due care and diligence is given special emphasis, and does not entail a duty to reach a particular outcome, except in some special areas, where the nature of the medical service rendered determines such special areas, e.g. diagnostic tests or laboratory services.

This practice is reflected in the Kouchner Law (Patients Rights Act) of 2002 that considerably enhanced the rights of patients and provided special compensation systems on the medical harm by the National Office for the Compensation of Medical Accidents (ONIAM) even in cases when the standard evidence of medical malpractice cannot be obtained (16,17)

To that end, whereas the Jordanian legal framework is based on the overall norms of civil liability and professional negligence as the main framework of determining the medical fault, the French legal framework assumes the broader approach by which the general principles are combined with special compensation regime. This represents a broader protective system framework to the patients, especially when it comes to delivering compensation to lost therapeutic opportunities.

## The Concept of Damage Caused by a Physician in Depriving a Patient of an Opportunity for Recovery

### Definition of Medical Damage in Law

Medical damage, in the context of legal liability, is the damage that was inflicted on the patient due to the breach of the professionally applicable scientific and technical standards of the profession that the healthcare provider, especially the physician, committed in relation to the patient. It does not take place just because an undesirable therapeutic result occurred but must offer evidence of fault that is manifested through negligence or lack of precaution or a failure to apply the due degree of care anticipated in a reasonably competent physician in the same circumstances (18).

This is coherent with the stipulations of the Jordanian Medical and Health Liability Law No. (25) of 2018, according to which, in Article (5), medical malpractice is determined when the medical professional actor-perpetrator of the medical service performed an act, omission, or negligence not consistent with the medical professional norms prevailing in the available working environment, and which caused harm to the beneficiary of the medical service (Jordanian Medical and Health Liability Law, 2018) (17,18).

According to the principles of the rule, the duty of the physician consists in duty of care, that is, in the duty of acting with reasonable care, and not in the duty of producing this or that medical outcome, except where stated otherwise in the special text of the law or contract. Accordingly, when the treatment fails or the conditions of the patient get worsened it is not in and of itself enough to prove medical fault (19).

These injuries can be explained by the factors which are beyond the control of the physician and they include the nature of the disease, the behavior of the patient or their family, the delay in consultations, or the non-adherence to medical recommendations. Such factors can result in the inability to recover, or survive without necessarily being explained as a medical error (20)

However, any violation of established medical professional regulations, either old-established or new due to the advancement of science and the particularities of the treatment case, which leads to the deprivation of the patient of a real and legitimate opportunity to recover or to improve his or her health is defined as compensable damage according to the doctrine of losses of opportunity.

### Definition of Medical Damage in Judicial Practice

The jurisprudence of other countries which has always been comparative judicial practice, and especially that of France, has always determined that the measure of the criminality of a physician is not subjective but objective. In

this regard, the conduct of a physician would be in comparison to the conduct of another physician of the same level of professionalism under the same temporal and spatial conditions and with equal available resources. (21).
No consideration is given to personal characters, outstanding abilities, or personal abilities of the physician but the standard is the behaviour of a reasonably good and a reasonably hard-working physician who acts in accordance with the professional rules. (22).
Depending on the circumstances surrounding the medical service delivery, considering the conditions before, during, or after the professional activity of a physician, and material and technical facilities of the healthcare facility, the judge is instrumental in the assessment of whether the physician adhered to the scientific and technical rules that were prevalent at that time. The modern jurisprudence has supported this approach in the area of civil medical liability. (23).

**The Legal Basis of Liability for Loss of Chance in the Medical Field**
The legal account of the loss of chance in the medical profession is built on the fact that damages caused by incorrect medicine application occur to deny the patient a realistic and legitimate chance of recovery or of escaping the worsening of his or her health state.
Although recovery is a probabilistic phenomenon and is not always achieved, recovery opportunity is a concrete and provable interest so long as such existed before the wrongful intervention of the physician. In case a healthcare mistake causes the loss of such an opportunity, a physician becomes legally liable. (24),
As an example, a disease at its initial phases can be treated in case proper and prompt medical care is administered. Nevertheless, when the doctor does not respond correctly within the professional mistake, i.e. prescribing a wrong treatment or not properly monitoring the situation of the patient, this can lead to complications that make the recovery process impossible. In this, the disease is not compensated as such, but the loss of the chance to recover due to the medical error (25).
In this respect, the opportunity as such is not what must be paid compensation; but it is the loss of the opportunity, when it has become definite and irreparable, which must be paid. It is therefore the obligation of the judge to determine the likelihood of success in treatment using the predetermined medical standards before the error ensues, when deciding the compensation to be awarded. (24).

**Damage, Its Relationship to Medical Error, and the Theory of Loss of Chance**
Injury is an essential component in proving the liability of a given medical practice. This harm can be in terms of physical harm, loss of materials or even the loss of a great opportunity that the patient would have had otherwise like an opportunity to recover or even an opportunity to earn a living (26).
The French administrative jurisprudence, in this regard, made physicians responsible to the loss of the opportunity of recovery of a patient in case of death after delivery by severe hemorrhaging. Nurse did not take good care of the bleeding, and although three days after giving birth, the patient was discharged, she died due to the absence of proper medical care(27).
The French decided that the liability of loss of the opportunity of recovery incurred by the patient fell on the physician and the healthcare institution because of the mistakes made in medical monitoring and recommendation (27).
In the situation of loss of chance, the damage can be physical, but could also be in terms of moral damage, the bodily integrity of the patient or their mental health. Moreover, it can spill to the family of the patient especially in situations where the patient was a breadwinner (or breadwinner). However, the creation of medical liability is not achieved by simply demonstrating the fault of the physician and the presence of the damage alone; there must also be the demonstration of the causal relation between the fault and the damage that results(28).
Courts can use the theory of loss of chance as a method to determine compensation especially in situations where the error committed by the physician is of serious nature and where it is not easy to prove causation according to the traditional standards or there is uncertainty concerning the causal relationship (25).
This approach is promoted by the Jordanian civil legislation. The Jordanian Civil Code No. (43) of 1976, Article (84) asserts that any individual who inflicts harm on another whether upon property, body or sickness is liable to full compensation of the harm caused including what the accident victim has lost in terms of chances to restore his or her health status or recover (Jordanian Court of Cassation, 1991).
The judicial practice in Jordan has implemented this principle on various occasions in medical cases. Court of Cassation decided the compensation of a child who was permanently disabled due to a medical diagnostic mistake, saying that the fault of a physician denied an opportunity to the patient to prevent the harm. Article (84) of the Jordanian Civil Code ( Jordanian Court of Cassation, 1991) was the basis of the decision obtained by the Court.
The theory of loss of chance is, therefore, an effective legal instrument that is applicable to handling cases that are of uncertainty or ambiguity in respect to causation. It enables the courts to compensate losses on the lost opportunity which was actually open to the patient before the medical mistake committed by the physician.

**Models of Loss of Opportunity for Patient Recovery**
**Loss of the Opportunity for Recovery Due to Diagnostic Error**
The French and Egyptian case laws have long held that not the presence of a diagnostic error per se that results in a physician liability can be demonstrated, only through proving that the physician acted in reasonable care equal to the reasonable care of a physician acting in the same position in comparable circumstances.
The liability occurs exclusively under the condition when the diagnostic error has been made based on ignorance,

the insufficiency of professional knowledge or the breach of the set medical standards, which the physician is expected to know due to his/her professional responsibilities and major (Qatar University – QSpace, 2025).
Ideally, diagnostic errors can be attributed to rushed, incomplete or shallow tests, or lack of proper evaluation of all possible pathological conditions. A case which was commonly known in Britain saw a doctor being convicted due to negligent examination of the patient who fell seven meters resulting in fractures being undetected. On the other hand, the French jurisprudence has held that a doctor cannot be held responsible by a diagnosis error when such erroneous diagnosis can be traced to misleading or incorrect information that a patient gave about his or her medical condition (29).
Proper diagnosis is a complicated medical activity and especially where there are new emerging or rare diseases (26). However, the doctors are expected to be the most careful when diagnosing a patient, which means that they should carry out all the necessary lab tests, imaging, and diagnostic tests.
To this end, a diagnosis error would not result in the medical liability unless it can be demonstrated that it was caused by negligence e.g. premature diagnosis without adequate information collection or without reviewing the medical reports.
In this regard, the Irbid Court of First Instance (Rights Division), in the decision No. 469/2020, concluded that the physicians did not violate their professional obligations because they took a child to all the required medical procedures, sent him to the intensive care unit, and offered appropriate treatment. This means that the court absolved the physicians of liability regardless of the subsequent diagnostic error because no professional negligence had been established (Irbid Court of First Instance, 2020).

**Loss of the Opportunity for Recovery Due to Therapeutic Error**

The treatment phase is regarded as one of the most significant parts of medical attention because any form of negligence and omission in the case can result in physician liability. Doctors have to follow the most recent treatment procedures in accordance with the professional standards. They are however not bound to a particular line of therapy as long as the treatment adopted adheres to the acceptable medical practices (30).
However, in a situation where ignorance or lack of medical knowledge is proven to have led to the choice of a mode of treatment, the doctor is liable to the damage suffered by the patient including loss of chance to recover. One of such cases was in Switzerland, in 1936, when a doctor was convicted of administering a new drug inappropriately, resulting in the patient injury (Swiss Federal Court, 1936).
Doctors are not allowed to perform developmental interventions on patients without their explicit and informed consent and without notifying them about the possibility of side effects. Article 7(e) of the Jordanian Medical Liability Law explicitly consists of some of the following obligations on a physician, which are; to prescribe correctly, to write down clear specifications on the treatment to be taken, that is the procedures to follow and the doses of the treatment to be taken, to ensure that the treatment is effective and safe, to correctly write down the prescribed treatment in the medical file of the patient and to sign it with the signature of the physician and the date in which the treatment was given to the patient. Jordanian Court of Cassation has affirmed in a number of decisions that the denial of an opportunity to recover due to the diagnostic or therapeutic mistake of a physician is a proven judicial rule. In this regard, hospitals and physicians can be liable to indemnify damages that will cause harm to the patient by depriving the patient of a real chance to prevent harm or reduce its impact (Jordanian Court of Cassation, 1991).
It remains obvious that the absence of an opportunity to recover could come along both as a result of diagnostic mistakes and therapeutic mistakes, as long as such mistakes deny a patient a real and valid opportunity that could result in recovery or health condition improvement (26).
Doctrine of loss of chance is therefore an efficient law tool to counter the hardship of establishing traditional causation as opposed to the necessity of providing fair compensation and better protection of patients rights.

**Loss of Chance Resulting from the Failure to Seek Assistance from an Anesthesiologist Legal Obligations of the Surgeon**

The set guidelines of the medical profession give certain legal duties on the surgeons undertaking any surgical procedure (31). One of these obligations was the duty to request the services of a competent anesthesiologist whenever the medical situation demands such a move. Lack of an anesthesiologist is not an incidental issue to be left to the will of the surgeon, but a possible kind of professional negligence.
Practically, a failure to obtain the services of an anesthesiologist in case of conducting surgical operations can cause the loss of a real chance of the patient recovery, and, therefore, the emergence of civil liability in the surgeon (Jamil, 2016). The anesthesiologist has special knowledge on the examination of the patient prior to and during surgery, the proper type of anesthesia to be administered; general anesthesia or local anesthesia and the physiological stability of the patient during the medical procedure. This is a vital position in ensuring the safety of the patient and reducing any health risks linked with surgical operations (32). In such a way, a surgeon can refuse to dispense without the help of an anesthesiologist only in the situations of the extreme emergency when the objective impossibility to invite a specialist occurs. The surgeon must in this extraordinary situation and do the most care and discretion before coming up with any decision that may impact on the life or health of the patient.(33).

**The Impact of Failing to Seek Assistance from an Anesthesiologist on the Loss of Chance of Recovery**

Failure to avail the services of a qualified anesthesiologist could result in serious legal and medical implications

to the surgeon that include:The harming of the patient due to failure to control the anesthesia e.g. administering wrong dosages or wrong form of administering anesthesia and hence directly posing a threat to the life of the patient (26) The absence of the real opportunity to recover when the health of the patient worsens because of mismanaged anesthesia or because the patient simply is not tracked appropriately before the surgical operation and during the process.
This has been established by French jurisprudence. The French Court of Cassation in its decision of 9 November 1977 found the surgeon guilty of not calling in the services of an anesthesiologist, including the responsibility of ensuring that the patient would recover without complications by having the patient strictly monitored after the operation (34).
The French courts have always viewed the inability of engaging a specialist anesthesiologist to commit the professional fault whenever the failure to do so leads to the failure to pursue a recovery opportunity despite the fact that the surgeon is otherwise qualified to undertake the surgical procedure (20)
Likewise, various decisions have been made by the Egyptian Court of Cassation stating that the surgeon is liable to the non-use of the services of anesthesiologist because this action amounts to a breach of the duty of care which could result in the possible failure to obtain and recover an opportunity or subject the lives of patients to dangerous risks (Egyptian Court of Cassation, 1961; 1977)
In one remarkable case, the court decided that the female physician was professionally careless by carrying out cesarean section at her clinic without involving the help of anesthetist, thus risking the life of a patient. This behavior was considered a professional error which led to the patient losing his chance of recovery (Egyptian Court of Cassation, 1961; 1977).

**The Theory of Loss of Opportunity in Medical Liability**

Loss of opportunity doctrine is not a new concept in the French legal system in the context of civil liability. A very specific form of harm has been defined by the French courts especially in medical cases which is the deprivation of his or her chance to recover because of a medical error. This was initially applied in practice in 1965 in the case of Alberttine Sarrazan, when the French Court of Cassation decided that a doctor who deprived the patient of the whole available medical opportunity was liable to the lost opportunity of survival or recovery. (31).

The case was decided with the focus that the loss of opportunity is a separate type of harm, which should be compensated by a legal court. Later jurisprudence of the French Court of Cassation continued to hold such, identifying loss of chance as a compensable legal interest in its own right. (31).
In the same vein, the theory of loss of opportunity has been embraced at the Egyptian judiciary. The courts in Egypt have ruled that one can claim compensation due to the loss of an opportunity as long as the expectations of the injured party are based on reasonable grounds. With this, compensation is computed in consideration of the amount of benefit that the injured party might have reasonably imagined would have been gained had the opportunity been achieved. (35).
The Jordanian law of lost opportunity is also applied in the civil liability in the medical field. Jurisprudence means that the harm caused by a lost opportunity is the inability of the person, who lost the opportunity, to achieve a result that would have been feasible in the regular situation. The distinction between actual harm especially on the prospective one and potential harm due to the loss of a possible opportunity of recovery or gain is necessary. The case law of the Jordanian Court of Cassation that has been set gives the assurance that harm caused by a lost opportunity attracts compensation, thereby offering sound protection to the patients in medical liability claims. (Jordanian Court of Cassation, 1991).

**Civil Medical Liability for Missing a Patient's Chance of Recovery**

Medical error, harm, and causal relationship between them are the three main factors, which form the foundation of civil medical liability. This model is incorporated in the Jordanian Medical Civil Liability Law No. (25) of 2018 (Jordanian Medical and Health Liability Law, 2018).

**Medical error in missing a patient's chance of recovery**

It is the foundation of the legal obligation of a physician to their patients and comes up as a result of any act, omission, or negligence of the medical professional that goes against the current professional standards in the medical environment and leads to harm (36). These mistakes can be due to negligence, recklessness, incompetence, or ignorance, and in other cases, it can be seen that they can be accidental (34).
Doctors are usually supposed to be able to utilize professional care when making difficult treatments, yet they are not infallible, as long as they do not intentionally evade difficult situations. Similarly, it is the responsibility of patients to actively engage in treatment and to have an understanding of the procedures and risks involved (15).
Medical malpractice standards of assessment are different in different jurisdictions. They include the subjective standards that compare the conduct of a physician with that of his or her standard practices and the objective standards that evaluate the conduct of a physician in relation to the accepted practice among other physicians of the same specialty and experience taking into consideration the circumstances of the case, urgency of action, and available resources (26).
The Jordanian Court of Cassation has been adamant that the test of evaluating the medical malpractice is objective and it is based on the qualifications and specialty of the physician, the conditions under which he works as also whether he adheres to the existing scientific practices (Jordanian Court of Cassation, 1991).

There are mostly two categories of medical errors: gross negligence, which is a straightforward deficiency in delivering the demanded standard of care, and minor or technical errors, which the physician is usually exonerated, unless he/she is proven to be grossly ignorant or in fraudulent behavior (37).
The negligence, reckless behavior, and the absence of due diligence are the main aspects of medical errors that are evaluated by the following criteria: the compliance with the professional ethics, the use of all the provided resources, the comprehensive description of treatment, and the responsibility of the physician to notify the patient about possible complications and risks (20).
In Jordanian jurisprudence, there exists a dispute on the extent of compensable harm when it comes to lost opportunity cases (36). One side of the discussion holds that the compensation is not being provided to the results that the patient may have achieved had he/she not been denied the chance; since they constitute the results of mere hope, as opposed to the results of fulfilment(34).
Other researchers distinguish actual harm and probable harm, in particular, harm of the future, due to the loss of a chance. This is notwithstanding this divergence as courts in Jordan have continually held that the lost opportunity damage should be compensated by means of paying damages on the basis of harm to the patient and thus helping hospitals to reinforce their protection of the law against the loss of future medical benefits as a result of professional mistakes..

**The Harm of Missed Opportunity in Civil Medical Liability**

Denial of the right to rescue or save life is one of the most serious types of harm in civil medical liability; this harm becomes real after the patient has been deprived of a genuine or a high likelihood of attaining a good result of treatment (38). Such injury can be caused by the careless actions of a physician such as the wrong diagnosis, insufficient follow-up post-op, insufficient delivery of treatment or anesthesia, or the inability to refer to a relevant specialist when it is required. (30).

**Elements of Damage Due to Missed Opportunity Existence of Actual or Probable Harm**

Liability and bringing the claim to compensation must be demonstrated by harm. The injury does not even need to have already taken place; it suffices that it is probable or will in the future take place (39). The presence of harm is verified in courts to make sure that it is not speculative. That is, the damage should have been or is bound to be, as judicial evaluation would decide (40).

**Confirmation of Complete Loss of Opportunity**

To recover compensation, a patient should prove that he or she has lost the chance to get a benefit in medical intervention (38). This implies that the patient will never be able to go back to his previous health condition or that his/her state is no longer treatable through the work of the physician acting independently.
The awards are given, not regarding the final result of the treatment, but regarding the lost opportunity - a concrete opportunity that was offered to the patient to recover, avoid complications, or live (Jordanian Medical and Health Liability Law No. 25 of 2018, Articles 2 and 5).
Certain courts have tried to apply the theory of possible harm to establish that a person is only liable because harm has occurred. Nevertheless, this is not very legally sound because the patient has to demonstrate that the physician committed professional negligence. This is usually determined via the medical testimony of experts (41).
Upon occurrence of liability, the physician is held civilly liable and liable to compensate the patient or family members of the loss of opportunity, which is considered a real and actual loss directly as a consequence of medical malpractice. The compensation is related to the loss of an opportunity to recover, to avoid complications or to save life (38) in particular..

**The Causal Relationship in the Harm of Missed Opportunity in Medical Liability Causation in Missed Opportunity Cases**

When referring to civil medical liability, it is important to prove the causal relationship between a damaging action and the harm in order to compensate (37). Jordanian Civil Code, article 266 provides that the damage should be a natural, direct result of the harmful act. Articles 257/2 and 258 also explain the liability in case of a combination of causes, with the direct cause being the one to be described initially (42).
In its civil aspect, the Jordanian Court of Cassation in Judgment No. 480 of 1986 pointed out that the opportunity and the loss of the opportunity should be distinguished. The potential harm is the opportunity, which does not justify the compensation, but on the other hand, the loss of opportunity is an actual harm that should be compensated. The effective cause theory will be implemented in this case: damages due to the opportunity loss should be a natural result of the damaging act, and there is a direct contact between the error made by the physician and the injury that the patient received.

**Lost Profits and Compensation**

According to the civil law of Jordan, compensation is an element that includes the level of damages, loss of profits, as long as the damage is the natural causation of the harmful activity. Even though the Civil Code does not directly present a theory of causation the judicial practice shows that there is an adoption of the principle of effective cause. This will make sure that an injured party receives the deprivation of a potential opportunity. Among them, it is worth mentioning Judgment No. 1788 of 2020 that helped define the compensation of the lost opportunity in accordance with the general principles of civil liability that presuppose demonstrating the harmful act, the harm

and the causation.

**Burden of Proof**

In the medical malpractice cases, the injured party has the burden of proving. In order to prove liability, the plaintiff has to prove the mistake of the physician, the damage suffered and a causal connection between the two. Evidence can be based on any evidence that is admissible, which can be a testimony of witnesses, circumstantial evidence, and expert medical reports (43).

The obligation standard differs: at the duties of due care, the plaintiff has to demonstrate that the physician did not act in accordance with the professional standards, yet at the guaranteed results, the standard is transferred to the achievement of the outcome, unless there are force majeure, the fault of a third party, or factors related to the patient.

Lost opportunity is a concept that has been well worked out in French and Egyptian jurisprudence. In France, the incidence of a patient missing out on a chance to recover because of a medical mistake has been deemed as a specific kind of harm that a patient can suffer and should be compensated (38).

The Egyptian Court of Cassation has also taken the same course and has incorporated compensation of lost opportunity on the condition that the expectation of the patient was reasonable and on justifiable grounds (44).

According to the Jordanian law, courts always support compensation of lost opportunity. The case of judgment No. 1640 of 2020 involved a physician who was accountable to pay damages that were caused by the mistakes during the first procedure, though not deliberate. Judgment No. 1788 of 2020 reiterated the aspects of tort liability, which include the harmful act, damage and causation, whereas Judgment No. 480 of 1986 made a distinction between potential harm (the opportunity) and actual harm (loss of opportunity) and made a basis on compensation.

**Linking Contractual and Tortuous Liability of Physicians with the Harm of Missed Opportunity**

Medical liability is a corner stone of the justice system that aims at protecting the patients and holding the physicians liable to professional care standards. This liability is based on the doctrine of due diligence as opposed to assuring a certain result (26).

It includes civil liability that aims at compensating patients who have suffered due to negligence or medical error by paying material and moral damages, and the other is criminal liability, which is made when a person suffers fatal injury or death owing to gross negligence (37). In most cases, the civil liability of a physician is of two origins including contractual and tortious liability.

The liability on contract arises out of the contractual relationship between the physician and the patient in which the former promises to give care and other relevant treatments and the latter promises to pay his services (39).When the physician neglects to do so and the outcome is harm to the patient, the contractual liability will demand compensation, whether he intended to do it maliciously or not (45).

The tortuous liability occurs when the doctor violates a legal duty stipulated by the law, hospital policies, or the general social institution and results in the injury of the patient beyond the scope of the contractual relationship (46).

In this regard, doctors have a responsibility of committing medical mistakes which lead to loss of the chance of recovery. The damage brought by such a wasted opportunity is part of the reasons why one should compensate the patient, regardless of whether the action was negligent or not (37).

The principle of equal causes was first used in the French jurisprudence until 1943 when the French Court of Cassation in Decision No. 236 believed that tort liability should be addressed to the main cause of the harm without considering incidental causes (47).

In France, the general perspective on liability of a physician is tortious, which is founded on professional and technical duties and not a duty to attain a certain result. The doctors must also provide normal care when treating patients but are not supposed to promise an outcome or full recovery (48).

In its decision of 2020, the Jordanian Court of Cassation affirmed that tortious liability, established in Article (256) of the Civil Code, is founded on three pillars, namely the harmful act, the fault, the damage, and a causal connection between them. The absence of any of these factors leads to the loss of legal content of the claim to compensation, even claims founded on the theory of missed opportunity (49).

The case of compensation of the injury of missed opportunity is a general civil liability rule implementation: it must prove that the harmful act occurred, the damage was caused, and there was a causal relationship between the two (50).

The liability in terms of medical contracts is also a liability of the contractual relationships in the private hospitals or the breach of the general law liabilities in the state hospitals where the state or the hospital administration can be held liable about the mistakes caused by the mismanagement or gross negligence.

The Jordanian Court of Cassation has confirmed that gross medical errors, i.e. conduction of unnecessary procedures, or lack of proper precautions, imply both civil and criminal liability, with the harm resulting in violation of professional obligations becoming the basis of the liability.

Civil medical liability is a concept that refers to either positive or negative acts committed by the physicians in the course of their duties that would have the legal responsibility when the act harms a person (51). This liability can either be based on express or implied medical contracts where the doctor has agreed to give the patient the right care. Violation of this obligation causing harm brings about the action of contractual liability, which is compensatory (34).

The 1913 decision of the French Court of Justice of Saint-Germaine-des-Prés reiterated that the harmful acts by a

physician make the physician liable whether there is a contractual obligation or not and that the professional responsibility to exercise the necessary standards of care is enough to prove negligence. (French Court of Cassation. 236, 1943). In case the breach committed by the physician is not really a contract, but a breach of the law, social, or hospital regulations, the liability is tortious. Any act done knowingly and volitionally in the absence of legal permission that material or moral damage is obligatory to the person who commits the act to pay the damages to the harmed person. Conclusively, the liabilities of contract and tort all issue into safeguarding the right to lost opportunity in the patient (37). The practice of law focuses on the fact that it is imperative to demonstrate a causal relationship between the medical error and the real damage that was suffered, either the loss of the opportunity to recover or other possible advantages that the patient might have obtained. This method balances the responsibility of care owed to the patient by the physician with the safety of the rights of the patient so that there is fairness and responsibility (38).

## CONCLUSION

This paper has discussed civil medical liability as the loss of an opportunity to heal a patient as it is one of the most litigated cases in the field of modern medical law. Such complication is caused by the overlap between the probabilistic medical concept and conventional theories of law of civil liability. The study sought to find the legal grounds of such liability, the definition of loss-of-chance damage and its elements, and the amount of its legislative and judicial acceptance with a speculative focus on the stances taken by the Jordanian laws and courts considering similar cases across France and Egypt.

It was revealed in the analysis that the theory of loss of chance puts a very fine line between two competing interests namely protection of the patient against the loss of rights in a hard to prove causation and the avoidance of holding the physicians to bear liability as they are not legally bound to provide the outcomes. In terms of this, the indemnification of the loss of an opportunity does not mean that the physician is liable to the mere failure of treatment as such but only breach of the duty of care in a way that denied a patient a real, and legitimate opportunity of recovery or survival. The comparative analysis with the French jurisprudence demonstrated that it had gone a long way in its evolution of extending patient protection, especially in the institution of the mechanisms of compensation of medical harm, despite the impossibility of proving the fault on traditional grounds. The Jordanian law mechanism is still restricted with such mechanisms. As witnessed, there is a slow but steady development of adoption of this approach by the Jordanian courts, though there is a strict adherence to the classical aspects of civil liability. The paper also validated the hypothesis that the theory of loss of chance is no longer simply a dogma, but is an efficient mechanism of law to be applied in cases where it is hard to prove a direct causal correlation between the mistake made by the physician and the eventual outcome, especially in those cases where recovery or survival is a priori probability. In this scenario, the harm that is compensable is not the failure of the treatment as such, but the going without a real and genuine opportunity, which would have become a reality had the physician adhered to the prescribed professional, scientific, and technical norms.

### Findings

1. Recognition of Loss of Opportunity Damage by the Law: The paper shows that, the Jordanian legislator has never explicitly wrote down the theory of loss of opportunity, but rather, the Jordanian courts have observed the inclusion of the theory, when applying the general principles of civil liability, especially those dealing with damages and loss of profits.
2.Judicial Distinction between Opportunity and Loss resulting thereof: Jordanian jurisprudence, as a consequence of the French and Egyptian jurisprudence, has made a distinction between the opportunity, which is by nature uncertain, thus not compensable, and the loss of the opportunity, which is a realized harm and compensable.
3.Likely Existence of the Causal Relationship: The research establishes the fact that the theory of loss of opportunity is a variation to the classical meaning of causation. One only needs to prove that the medical mistake was a substantial cause in denying the patient a true and substantial chance to recover or to evade injury, without necessitating demonstration that the error was the direct reason of the end result (37).
4.Objectivity of the Standard of Medical Fault: The results show that the criterion of the evaluation of medical fault in the case of loss of opportunity is objective. It is compared with the behavior of a reasonably competent physician of the same kind, working under similar circumstances, and not with the personal talent or extraordinary capability of the particular physician.
5.Strong and decisive role of medical expertise: The paper identifies that determining the presence of medical fault and the loss of opportunity depends largely on the technical medical expert reports. These kinds of reports are the key evidentiary means of evaluating the opportunity existence, its level of probability, and whether or not it may be realized before the medical error takes place.

### Recommendations

1. It is suggested that the Jordanian legislator explicitly enshrine the compensation of loss of opportunity in the medical sphere, according to the comparative legal systems, to increase the legal certainties and to standardize the interpretation of the law.
2. It is advisable that both legal and medical guidelines be adopted to help the judges to evaluate the likelihood of the lost opportunity and the reasonable amount of the compensation, which is guided by the accepted scientific and professional standards.
3. The research proposes the implementation of permanent and special medical expert committees under the medical liability cases, in order to guarantee the impartiality, precision, and objectivity of technical expert reports.

4. It is advisable that specific training programs should be created on the judges in the area of medical law and loss of opportunity theory as medical liability cases are technical and interdisciplinary.
5. In the research, the authors point out the necessity to enhance the culture of medical documentation and to make healthcare facilities strictly document every medical procedure; medical documentation is one of the key elements that protect the rights of patients and physicians..

**REFERENCES**


1. Adejumo OA, Adejumo OA. Legal perspectives on liability for medical negligence and malpractices in Nigeria. Vol. 35, Pan African Medical Journal. 2020.
2. Meldrum MA. Loss of a chance in medical malpractice litigation: expanding liability of health professionals versus providing justice to those who have lost. J Law Med. 2001;9(2).
3. Iez AlDeen Merza Naser. The Legal Nature of the Engagement A Comparative Study. الرافدين للحقوق. 2005;10(26):183–246.
4. Dodeen MM. Compensability of moral damage in Islamic contract law: A comparative analysis of the Palestinian, Jordanian and Qatari civil codes. Vol. 34, Arab Law Quarterly. 2020. p. 167–90.
5. Jafari Nadoushan AA, Rahmani Manshadi H. Civil Liability Arising from Health and Medical Research. J Community Heal Res. 2023;
6. Ehirim UG. Escalating Medical Negligence in Commonwealth West Africa: Evaluating the Efficacy of Deterrence Mechanism. J Leg. 2025;18(1):94–125.
7. Stefanović N. Medical error: Civil liability for the damage. Pravo - Teor i praksa. 2020;37(4):13–25.
8. Rothschild JM, Hurley AC, Landrigan CP, Cronin JW, Martell-Waldrop K, Foskett C, et al. Recovery from medical errors: The critical care nursing safety net. Jt Comm J Qual Patient Saf. 2006;32(2):63–72.
9. Alhasan TK. Independent contractors in hospitals: Liability, consent, and patient safety. J Healthc Risk Manag. 2025;45(2):15–23.
10. Alhasan TK. Managing legal risks in health information exchanges: A comprehensive approach to privacy, consent, and liability. J Healthc Risk Manag. 2025;44(4):12–24.
11. Hannawa A. Principles of medical ethics: implications for the disclosure of medical errors. Medicolegal Bioeth. 2012;1.
12. Altarawneh HAS, Shtayat TDT. The Nature of the Plastic Surgeon’s Commitment in the Jordanian Medical Liability Law No. 25 of 2018. Dirasat Shari’a Law Sci. 2024;51(2):1–12.
13. Al Sharah R, Aladwan A. The Commitment to Inform the Patient According to the Jordanian Medical Liability Law of 2018. Polit Sci Law Ser. 2024;3(1):9–32.
14. Zaid N, Magableh S. Civil Provisions Of Medical Liability In The Jordanian Law. J Namibian Stud [Internet]. 2023;34:2197–5523. Available from: https://orcid.org/0000-0002-7791-1182
15. Nogaroli R. Civil Liability in Healthcare. In: Medical Liability and Artificial Intelligence. 2025. p. 81–122.
16. Annas GJ. A National Bill of Patients’ Rights. N Engl J Med. 1998;338(10):695–700.
17. Garay A. The new French legislation relating to patients’ rights and the quality of the health care system. Vol. 9, European Journal of Health Law. 2002. p. 361–79.
18. Vinet L, Zhedanov A. A “missing” family of classical orthogonal polynomials. J Phys A Math Theor. 2011;44(8):8–23.
19. Jones D, Mitchell I, Hillman K, Story D. Defining clinical deterioration. Resuscitation [Internet]. 2013 Aug;84(8):1029–34. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0300957213000440
20. Kumar L, Bastia BK. Medical negligence-meaning and scope in India. J Nepal Med Assoc. 2011;51(1):49–52.
21. Valcke C. Comparative law as comparative jurisprudence - The comparability of legal systems. Vol. 52, American Journal of Comparative Law. 2004. p. 713–40.
22. Patrell OL. La responsabilité civile – produits. Assurances. 2024;47(4):325.
23. Pillai DA V. Determination of Damages in Medical Negligence Cases: An Overview. SSRN Electron J. 2020;16–39.
24. Wegman B, Stannard JP, Bal BS. Medical liability of the physician in training. In: Clinical Orthopaedics and Related Research. 2012.
25. Holčapek T. Doctrine of loss of chance in medical malpractice cases: Comparative, international and transnational aspects. Czech Yearb Public Priv Int Law. 2017;8:444–57.
26. Ludwichowska-Redo K. Uncertain Causation, Loss of a Chance and Proportional Liability in Medical Malpractice Cases. J Eur Tort Law. 2024;15(3).
27. Nguyen TBA. Comparative analysis of medical malpractice law. Asian J Law Econ. 2019;10(2).
28. Steffen M. The french health care system: Liberal universalism. J Health Polit Policy Law. 2010;35(3):353–87.
29. Kasalak Ö, Alnahwi H, Toxopeus R, Pennings JP, Yakar D, Kwee TC. Work overload and diagnostic errors in radiology. Eur J Radiol. 2023;167.
30. Milne E. Decriminalising Abortion in the UK: What Would It Mean?, edited by Sally Sheldon and Kaye Wellings. Eur J Health Law [Internet]. 2020 Aug 13;27(4):415–7. Available from: https://brill.com/view/journals/ejhl/27/4/article-p415_6.xml
31. Wagner JK, Meyer MN. Genomic medicine and the “loss of chance” medical malpractice doctrine. Hum Genet Genomics Adv. 2021;2(3).

32. Cooper JB. Critical role of the surgeon-anesthesiologist relationship for patient safety. Anesthesiology. 2018;129(3):402–5.
33. Chawla KS, Rutkow L, Garber K, Kushner AL, Stewart BT. Beyond a Moral Obligation: A Legal Framework for Emergency and Essential Surgical Care and Anesthesia. World J Surg [Internet]. 2017 May 8;41(5):1208–17. Available from: https://onlinelibrary.wiley.com/doi/10.1007/s00268-016-3866-6
34. Beraldo A de MS, Pereira PMF de L. The theory of loss of chance in medical liability applied within Brazilian jurisprudence. Med Law. 2012;31(2).
35. Giunchi E. Adjudicating family law in Muslim courts. In: Adjudicating Family Law in Muslim Courts. 2013. p. 1–167.
36. Awaisheh SM, Alsaraireh N, Alkasasbeh AAM, Odeibat MA, Al-Khraisat WMM, Kurdi AAR. The Extent to Which Recourse to Arbitration Is Permissible in the Settlement of Disputes Arising under Procurement Contracts. J Hum Secur. 2025;21(1):13–8.
37. Kadner Graziano T. Loss of a Chance in European Private Law 'All or Nothing' or Partial Liability in Cases of Uncertain Causation. Eur Rev Priv Law. 2008;16(Issue 6).
38. Pallocci M, Passalacqua P, Coppola GM, Treglia M, Marsella LT. Loss of chance in medical professional liability: the measure of our ignorance. Clin Ter. 2025;176(2):48–52.
39. Богдан Петрович Карнаух. Uncertain causation: two hunters dilemma. Probl Leg. 2020;(149):49–61.
40. Amman Court of First Instance. Judgm No 883 2020 Amman, Jordan. 2020;
41. Amman Court of First Instance. Judgm No 3467 2021 Amman, Jordan. 2021;
42. Leavens A. A Causation Approach to Criminal Omissions. Calif Law Rev. 1988;76(3).
43. Izabela Adrych-Brzezinska. View of Burden of Proof in Medical Malpractice Cases under Polish Law. Univ Gdański [Internet]. 2021;12. Available from: https://czasopisma.bg.ug.edu.pl/index.php/gdanskie_studia_prawnicze/article/view/5703/4969
44. Aawishe S, Al-Hassan T, Mansour A. The status of digital evidence in administrative litigation. Al-Balqa J Res Stud. 2024;27(3).
45. Al-Zubi JK, Maaqqbeh M, Awaisheh SM, Mofleh YA, Awaisheh SM, Alhasan TK. Progress and Challenges in the Legal Framework of Women's Rights in Jordan. Int J Crim Justice Sci. 2024;19(1):519–31.
46. Awaisheh SM. From paper to pixels: the legal status and challenges of electronic writing in administrative contracts. A comparative study of current legal systems. Electron Gov. 2025;21(2):210–26.
47. Duguet. Wrongful Life: The Recent French Cour de Cassation Decisions. Eur J Health Law. 2003;9(2):139–49.
48. Mora JC, Kaye AD, Romankowski ML, Delahoussaye PJ, Urman RD, Przkora R. Trends in Anesthesia-Related Liability and Lessons Learned. Vol. 36, Advances in Anesthesia. 2018.
49. Obaid F, Alougili M. Jordanian Diplomacy and Food Security during the COVID-19 Lockdowns: A Case Study. Al-Balqa J Res Stud. 2025;28(2):58–71.
50. Alabdallat YJ, Alsalhi HK. Navigating Medical Liability in Jordan: Review. JAPA Acad J. 2025;3(1):1–4.
51. Pandit MS, Pandit S. Medical negligence: Coverage of the profession, duties, ethics, case law, and enlightened defense - A legal perspective. In: Indian Journal of Urology. 2009. p. 372–8.