



## RESEARCH ARTICLE

## Penal Liability Arising from Medical Malpractice: A Comparative Study of Egypt and France

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### ABSTRACT

This research navigates the intricate terrain where penal law intersects with the medical profession, mainly focusing on physicians' evolving liability in malpractice and harm to patients. A comparative analysis is drawn by examining scholarly discussions and legal frameworks centred on the legislation of Egypt, France, and other jurisdictions. Recent progress has made it clear that medical malpractice during the transfer of human organs between living humans and human inoculums can lead to both civil and criminal liability for doctors. This study sheds light on malpractice's complex role in these areas. The convergence of penal and civil liability on malpractice triggers a complex dialogue, especially as diverse perspectives in Egypt and France reveal ongoing challenges in defining the foundations of medical malpractice liability. The study adopts a comparative approach to achieve a comprehensive understanding, systematically analyzing healthcare legislation and juristic frameworks across multiple countries. The qualitative doctrinal research method is chosen based on the research questions and study objectives, ensuring a meticulous analysis of relevant legislation and case laws. The exploration extends to regulations governing organ transfers, gamete transfers, and human inoculums, focusing on how Egypt and the UAE navigate these critical medical procedures. Legislation in these regions emphasizes safety consent and prohibits financial considerations related to human organs. The study also uncovers variations in European jurisprudence, showcasing debates on using human gametes in research. Noteworthy gaps in specific legislation, like the absence of explicit liability, underscore the necessity for comprehensive regulatory frameworks. The analysis paints a vivid picture of the evolving legal landscape, emphasizing the continuous need for clarity and ethical considerations in response to the intricacies of modern medical practices.

### INTRODUCTION

The medical profession has increasingly become a core factor in the progress of countries all over

the world (Lozano et al., 2020). Since it directly impacts a country's progress and affects individuals within society, high standards of service and in-depth

skills and specializations are demanded from medical practitioners (Manna, 2020). As the global healthcare system advances, the legal scrutiny applied to the work of physicians has also progressed, giving rise to the question of liability arising out of professional malpractices by physicians. Whether resulting from their negligence or being committed intentionally, they must be subjected to legal liability, both penal and civil liability (Castro et al., 2019). The questions become more complex when the law has to keep pace with ever-developing medical procedures and machines. Advancements, such as organ donations and the invention of new medical devices and equipment, play a crucial role in sustaining or restoring vital functions in individuals facing life-threatening situations. However, these advancements have raised unique questions about the individual liability of physicians responsible for the associated medical work (Miziara and Miziara, 2022).

Legal scholars and medical experts have extensively discussed medical malpractice. Although literature has contributed significantly, there remains a need to establish penal liability for medical malpractice in a way that aligns with the reality and nature of medical work and criminal rules. Furthermore, due to the inherent fallibility of individuals in the face of illness, it is imperative to establish the rules and foundations upon which such penal liability for medical malpractices is required to be based (Gutorova et al., 2019). As such, this research looks into the scope and limitations of penal liability arising from medical malpractice. It shall also delve into the penal and civil liability for malpractice practices in various jurisdictions, with a special focus on penal liability in transferring human organs and human inoculums to show the importance of the scope of criminal law to incorporate medical negligence claims. In addressing the important issues of penal liability for medical malpractices, this research aims to put forth the trends in various scholarly discourses and legal jurisdictions on this subject. The primary concern stems from recent developments in medical science and advanced medical devices, which present unique challenges globally. Therefore, it is crucial to examine the scope and limitations of penal liability associated with physician malpractices (Tobin and Walsh, 2023). Through comprehensive analysis and inquiry, this

research seeks to unravel the responses of various legal frameworks in different jurisdictions concerning the evolving landscape of medical malpractice and recommends improving the legal discourse on the subject.

By conducting a comparative study, we can better understand how different legal systems approach and address penal liability in medical malpractice cases. As such, it offers guidance for refining and improving legal frameworks related to medical malpractice. A comparative approach allows for examining cultural and contextual factors influencing legal perspectives on medical malpractice. This can promote cross-cultural understanding and cooperation in addressing challenges in global healthcare and legal systems. It can stimulate further research and discussions in law, medicine, and criminal liability.

The key objective of the research is to identify the extent to which physicians are liable for all medical malpractices, especially in cases where such malpractice leads to influence and/or harms human life or the safety of the human body. The research aims to comparatively analyze various legal jurisdictions, such as Egypt and France, to comprehensively study legal discourse and juristic responses on this subject. In this context, the following questions are intended to be answered:

- What are the civil and penal liability principles established for incorporating medical malpractice claims against physicians in various jurisdictions?
- What is the extent and liability of the criminal liability of physicians for malpractice, especially in transferring human organs and human inoculums?
- What is the difference between technical medical malpractice and physical medical malpractice?
- What are the applied models of medical malpractice legislation in different comparative jurisdictions?

## LITERATURE REVIEW

Medical malpractice and its legal implications, including penal liability for practitioners, have been a critical concern in healthcare and an important point of discussion in various academic discourses.

Numerous scholars have delved into the global landscape of medical malpractice, highlighting its impact on healthcare systems and legal frameworks. For instance, Gutorova et al. (2019), in their study about the necessity of criminal legislation and judicial practice improving in the medical negligence sphere, concluded that medical malpractice was a very common negative social phenomenon and demanded not only criminal liability but also civil or disciplinary actions. Concerning criminal liability, the study concluded that two approaches are applied in contemporary times. Firstly, it is a distinct norm in criminal law (Latvia, Ukraine), and secondly, it applies rules for negligent homicide or injury (Germany, Poland). In jurisdictions with a specific rule, sanctions for medical negligence were found to be comparatively lenient (Gutorova et al., 2019). However, while emphasizing the need for an effective legal mechanism, the study needed to specify how such a mechanism should be structured.

Scholarly discourse and practical implementation of laws in various jurisdictions have often been limited to the criminal liability for medical malpractice in the case of gross medical negligence manslaughter (Phillips et al., 2021). In Egypt, physicians are subjected to the country's common laws, which include Penal Law, Civil Law, and the Code of Criminal Procedures, on the instructions of the Public Prosecution, and only in high-risk situations are criminal laws invoked (Mashali et al., 2020). The laws of medical errors and physicians' liability according to Islamic regulations (including Egypt) are described as contractual and derelict. In addition to that, French law also enumerates this principle. Accordingly, the judiciary has indisputably agreed that a physician is responsible for any medical malpractice, whether in the public or private sector. While the government ought to guarantee quality medical care in the public sector, a physician is personally responsible if he works in the private sector (Smadi et al., 2019).

However, in general, the severity of bodily injuries is seen by legislators as a differentiating factor for invoking criminal liability in medical negligence cases. Criminal liability is only invoked in cases of severe bodily injury or death, and such intervention is considered appropriate only in cases where there is no alternative legal mechanism available.

(Antoniuk, 2020). For example, in France, as per the Observatoire des risques médicaux (the medical risk monitoring agency), malpractice by surgical specialities (except plastic and obstetrics) accounted for 61.9% of the medical negligence cases and resulted in awards of more than D 670,000,000 over five consecutive years until 2017 (ONIAM, 2015). The compensation procedure in France involves an amicable settlement through a letter to the hospital or the CRCI (French Regional Conciliation and Compensation Commission) adjudication for compensation. Public healthcare complaints go to administrative courts, while private cases reach the Tribunal de Grande Instance. Breaches of ethics can be reported to the medical association for disciplinary actions. Common factors in litigation include insufficient patient information, treatment risks, incorrect diagnoses, and surgical site infections (Mouton et al., 2018).

As such, while criminal charges may be pursued if there is evidence of intentional harm or gross negligence, criminal proceedings are less common and typically reserved for cases involving clear intent or egregious misconduct. As a result, this aspect of liability for medical malpractice remains open for further academic research. Further, the comparative perspective between Egypt and France remains an area that needs to be explored, warranting further research to understand how each jurisdiction addresses penal liability in the context of medical malpractice. This study aims to contribute to the existing body of knowledge by providing a focused and in-depth analysis of the legal intricacies in different jurisdictions. Striking a balance between justice for patients and accountability for healthcare professionals, the article aims to uphold the highest standards of medical care while providing avenues for redress in malpractice cases.

## **METHODOLOGY OF RESEARCH**

This research employs a dual methodology to examine the analysis of penal liability for medical malpractices. Initially, a descriptive approach is utilized to delineate and identify the legal discourse surrounding medical malpractice, specifically addressing the extent of liability across various stages of doctor-patient interactions. Subsequently, an analytical approach is

applied to scrutinize legal texts that govern and define such liabilities in different jurisdictions. These texts analyzed include French medical work law, Public Health Law of 1945 (of France), Law No. 415 of Egypt (Medical Professions Law), Jordanian Penal Code, French Civil Code, Egyptian Civil Code, Federal Decree-Law No. 5 of the United Arab Emirates, etc. The study adopts a comparative approach to achieve a comprehensive understanding, systematically comparing healthcare legislation and juristic frameworks across multiple countries, including France and Egypt. The qualitative doctrinal research method is chosen based on the research questions and study objectives. This method involves meticulous analysis of relevant data collected through analytical means, aligning with the aim of the study and ensuring a robust exploration of the legal landscape related to medical malpractice.

## RESULTS AND DISCUSSION

### Medical malpractice

*Existing penal and civil liability:* The prevalence of many medical malpractice claims has resulted in a dual form of medical liability, i.e., penal and civil liability, in different jurisdictions. As shown in the discussion that follows, there is criminal liability when a doctor's intentional actions result in death, permanent disability, or severe harm. Civil liability arises when a physician's malpractice causes material harm to the patient, enabling the patient to claim compensation. As such, it is important to explore the definitions of medical work under different judicial systems and analyze the concept and scope of penal liability and its applicability and limitations in medical malpractice cases.

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*Penal liability arising from medical malpractice* : Savatier's definition, one of the most famous definitions of medical work, defines medical work as "the work implemented by a qualified person to heal others" (Savatier, 1956). However, the French legislation has not included a precise definition of medical work, so the definition of medical work might be deduced from the provisions of the French medical work law, where a text stated in the law of November 30, 1892, defines medical work as: "medical work is considered in the case of "treatment of diseases

and surgeries only; when it is carried out without a physician, it is considered illegal for practicing medicine." The scope of the definition has since been expanded by the Public Health Law of 1945, which includes diagnosis and treatment in the said definition (Renaut, 1999).

In Egypt, legislation has yet to include a precise definition of medical work, but it is possible to determine its content through various legal texts regulating it. For example, article 1 of Law No. 415, i.e., the Medical Professions Law, issued in 1945, amended by Law No. 491 for the year 1955, Law No. 319 for the year 1966, and Law Nos. 29 and 46) for the year 1965, stipulated that no one may give medical advice or clinic to a patient, perform surgery, perform childbirth, prescribe medication, treat a patient, or take a sample from the body of human patients for the purpose of laboratory medical diagnosis by any method, or prescribe eyeglasses unless determined by a decision issued from the Minister of Public Health (Dupret 2004).

In both of these jurisdictions, it has been found that liability for actions and medical malpractices is divided into two types: moral and legal. While moral liability is excluded from the legal penalty circle, the law determines a legal penalty for legal liability. It is agreed legally and in jurisprudence that legal liability is divided into penal and civil liability. The basis of penal liability within the traditional school of penalizing and punishing is based on the fact that a person enjoys freedom of choice and action. As such, if freedom of choice is negated or lost by the person who committed the act entailing such liability, the liability is not formed against him; therefore, the penalty does not fall on him (Husni, 1973).

Concerning the motive, the modern traditional school tends to state that resisting the evil motive makes the person enjoy the freedom of choice, and he/she is questioned prenatally. Still, in the case of denial of freedom of choice for the person, penal liability is denied" (Bilal, 1995).

The elements of the penal liability of the natural person have been limited to two components: consciousness and intention (freedom of choice). In the legislator's view, consciousness means perception or differentiation. A person is only considered conscious if he can differentiate and is less than seven

years old. Additionally, a person who has a mental disability is not considered conscious and is not liable in this context. The determination of consciousness is relevant at the time of committing the act. A person may be able to differentiate, but when committing a crime, he might not be conscious, like a drunk person. The term "consciousness" has been defined by some jurists as "the ability to comprehend the origin and nature of the act and anticipate the effects that would bring it about" (Husni, 1973).

As per many Arab penal legislations, the Jordanian Penal Code under Article 1/74 states, "No one is judged except by a penalty unless he or she commits the act consciously and willingly". The second element of penal liability is intention (freedom of choice). The will is a person's ability to freely choose among the options available to him and then make a choice among them. A person is considered liable if the will is directed towards sinful behaviour that has been legally penalized (Husni, 1973).

However, a jurisprudential dispute has arisen about how penal liability towards legal persons can be realized. Two trends have protruded in this regard. First Trend: This tendency does not recognize the penal liability of the legal person and relies on the principle that 'will' is a human force. It is an indispensable component of the moral pillar of every crime. It is not possible to question a person who lacks a will. As such, the crime is attributed to the person who committed the crime, and that is the natural person embodying the moral person (Husni, 1982). Secondly, achieving the penal liability of a legal person is dissonant with the application of freedom-depriving penalties, as these penalties are not perceived to be imposed on the legal person. Thirdly, evidence of the penal liability of a legal person contradicts the principle of personal punishment, as the penalty is not applied to a person who did not commit the crime and has not proved that the elements of the crime have been fulfilled (Husni, 1982).

*Civil liability arising from medical:* Most modern legislation has tended to state that civil liability is based on the notion of malpractice (Prudnikova, 2019). Meanwhile, the French Civil Code stipulated under Article 1382 that "every act, whatever it may be, that occurs to a person while harming others, obliges the one who has committed it to compensate

for such a harm.' This corresponds to the text of Article 163 of the Egyptian Law: every malpractice that causes harm to others obliges the one who committed it to pay compensation. It has been found that the superposition or overlap between the convening of penal and civil liability is based on the idea of malpractice. At the same time, the damage requires only civil liability (Sage et al., 1994).

The idea of malpractice has been based on two elements: the first is a deviation from the behaviour familiar to the person used to it. In contrast, the second element is moral and is represented in the consciousness and differentiation that characterize the person so that he or she can be questioned about his or her actions. The Egyptian Civil Code has stipulated this. Article 1/164 of the code lays down the principle that a person is liable for illegal actions done by him or her while he or she differentiates. This means that whoever commits a harmful act is liable for it unless he or she is in a state compelling him to commit this act for a legitimate reason. The legitimate reasons can be treatment, lack of differentiation due to young age (under seven), or mental disability such as a state of insanity or dementia. However, suppose the loss of differentiation and consciousness is due to a person's malpractice, like intoxication. In that case, he or she is liable for the act committed and occurring in that state. The determination of civil liability for medical malpractices in Egypt has sparked controversy, particularly regarding the classification of malpractice as either tort or contractual liability. (Younes, 2021).

In France, French jurists often categorize medical malpractice causing harm to the patient as rooted in tort liability. This classification stems from the expectation that physicians must conduct medical procedures with meticulous care (G'Sell-Macrez, 2011). However, most French jurists follow the establishment of contractual liability for incidents involving a physician due to medical malpractice. The decision of the judiciary ruling issued by the French court Cassation dated May 20, 1936 (The arrêt Mercier (Nicolas, 1936) has had a significant impact on the formation of such a trend among the majority of French jurists (NYS, 2001). It has been because if a patient wants to demonstrate a physician's lack of commitment to the intended purpose of their

work, they can refer to the articles of the contract for clarification and support. On the other hand, if a patient seeks to establish the physician's malpractice in pursuing the intended goal during their work, they can consult general rules assessing the physician's commitment, precautions, and insight, determining the presence or absence of tort liability for the physician (Hagras, 2011).

Meanwhile, in Egypt, it has been viewed by some legal scholars that a physician ought to have two obligations, the first of which is imposed by law. As such, in the case of a physician committing malpractice while he or she is performing his work and causing harm to others, the liability arising against him is based on tort. The second is imposed through the contract concluded between a physician and a patient to carry out the medical work requested of him (Swar, 1993).

In one of the appeals before the Court of Cassation in case Cassation 3/19/2013, Judgments of the Court of Cassation, No. 1242, it was held that the liability of the physician chosen by the patient to treat him is decided based on contractual relations between the physician and patient. Further, a physician's commitment is not an obligation to fulfill a result but to diligently take care as required. Whether or not the patient fully recovers or the operation is successful, the physician is expected to make sincere and vigilant efforts, adhering to established medical principles, unless exceptional circumstances dictate otherwise.

In several rulings of the Egyptian judiciary, it has been recognized that a physician's liability is focused on tort liability. Under tortious liability, a physician's conduct is assessed based on the expected behaviour of a knowledgeable and vigilant medical professional. Any deviation from this standard renders the physician liable under tortious liability provisions (Mustafa, 2017). In Egypt, the prevailing view is that a physician's liability is rooted in tort. This belief is grounded in the understanding that the law and public order protect the integrity and life of the human body. Consequently, it is inconceivable that human life and bodily safety can be subject to a contract. Any harm to them necessitates holding the physician accountable under tort liability rules (Mustafa, 2017).

*Applied models of medical malpractices that require penal liability:* There has been tremendous

development and advancement in the field of medicine and disease treatment, resulting in controlling the diseases considered incurable (Buzhor et al., 2014; Al Ferdous et al., 2020). Further, conditions like heart and lung diseases, which were considered irreversible because of a lack of therapeutic medical technology, have not only become manageable but curable to a large extent with devices and medicine that restore the body's organs to their normal activity (Altyar et al., 2023). These medicines and devices have also made transferring and transplanting human organs possible, thus introducing new legal challenges related to the field (bin Sahimi et al., 2023; Rachman and Hendrawan, 2021; Khanh, 2020). In addition, doctors now have to deal with problems related to replacing damaged organs in a patient's body, transferring human body parts like gametes and using human vaccines for treatment (Vidalis, 2023; Jam et al., 2016). Consequently, these developments have raised questions related to legal considerations in malpractice cases and prompted the need to reevaluate the legal principles governing medical malpractice, particularly in penal liability at different stages of doctor-patient interactions during medical care.

*Penal liability arising from medical malpractice during the stages of diagnosis and treatment:* As discussed earlier, medical work has become characterized by a broad concept encompassing various stages of diagnosis and treatment where medical work is formed, and its practical and temporal scope extends. Per the proven experiences from judicial rulings, medical malpractice extends to all stages of medical work, including diagnosis, treatment, and follow-up, each contributing to the overall practice of medicine. So, the essence of medical work for liability arising from malpractices can be divided into three stages: first, the pre-treatment stage; second, the treatment stage itself; and third, the post-treatment stage, where medical work ends (Jutel, 2009).

The medical examination stage begins when a physician superficially examines the patient's health condition by observing his or her condition and using medical machines and equipment to verify the presence of certain indications or phenomena to help the physician make a diagnosis. The

physician's malpractice and failure to conduct the initial examinations are considered negligence that could result in liability towards him (Jutel, 2009).

The doctor located in the same external circumstances surrounding the liable doctor, who is similar in degree of certification and specialization, and the same is true in the general circumstances that exist, should examine the care of a vigilant man. Given the intrinsic importance of diagnosis in detecting serious diseases and injuries, the physician must depend on all necessary medical means to diagnose a patient. One illustration is the care that French legislators require before delivery to anticipate and prevent any unintentional events that might endanger the safety of the fetus during pregnancy or afterward for both the child and the mother (Extraits, 2011).

Further, the French judiciary has mentioned that, before undertaking surgery or carrying out treatment, the patient must undergo a preliminary medical examination. The physician's negligence in conducting such examinations constitutes malpractice, according to which liability is formed against him. In this context, the Rouen Court has held that "the surgeon who gave a wrong diagnosis to a pregnant woman that the pregnant woman had a fibroid and then performed an operation that resulted in her death is attributable to malpractice due to the physician's negligence to inquire and verify the diagnosis of the woman's condition by the attending physician, as well as for inattention to take the essential X-rays to ensure that there is a pregnancy case (Aburumman and Al-tahat, 2023).

On the other hand, the Egyptian judiciary, in a similar situation, in a ruling by the Court of Cassation, convicted a physician for the crime of murder by malpractice. The malpractice was held to be committed by misdiagnosing symptoms of dog disease as being another disease, i.e., rheumatism in the knee. Although the physician was aware that the patient was bitten by a dog and the wounds on his hands were cured, he made a diagnosis without taking into consideration the necessary measures, like analysis and microscopic or clinical examination, to ascertain the nature of the disease despite a strong reason to suspect it, which is the appearance of many symptoms of the disease on the patient.

It has been normally found that the physician is

to specify the treatment that has been reached beyond the diagnosis stage in the prescription, which is defined as "the written document prepared by the attending physician; this document includes determining the patient's medical condition after carrying out the diagnosis process, determining a system that the patient is to follow, or prescribing medications to treat the disease that the patient suffers from (Mélenec, 1982).

As for the two phases, treatment and surgery, the French Court of Cassation—the Specialized Penal Chamber—in its ruling decision [1] convicted a physician working in plastic surgery for murder by negligence. The facts of the case were that a physician carried out plastic surgery on the nose and ear of a 21-year-old girl, and anaesthesia was given to the girl before the surgery by the same plastic surgeon. Two hours after the operation ended, the patient had difficulty breathing and fell unconscious, resulting in her death after being in a coma for several days. Despite the attempts of the anesthesiologist, who was called later, she had lost consciousness. The physician was tried in a court of law for not using the anesthesiologist. Furthermore, the court attributed malpractice to the physician for negligence in supervising the patient after the surgery.

As for the Egyptian judiciary, a ruling issued by the Egyptian Court of Cassation (Cassation 30/6/1953 AD, Collection of Cassation Provisions, Q4, No. 364, p. 1033) held that the physician may be questioned about his malpractice when the said malpractice committed is apparent and does not bear any discussion, or there is no need to subject it to a technical review. However, the issue concerns scientific matters in which there are various views of physicians, and the physician in question saw the adoption of a certain theory in his work as feasible and not another as the better option. In that case, the physician is not blamed (Al-Ibrashi, 1930).

The Egyptian Court of Cassation also ruled that malpractice is the distinguishing factor in non-intentional crimes. The permissibility of the physician's work stipulates that the medical work should conform to the established technical principles. Any negligence on the part of the physician in following these principles, whether due to negligence or intentional violation, resulting in

disregard or failure to fulfil his work, incurs both civil and penal liability (Cassation 20/12/2006, Judgments of the Court of Cassation, Penal Chambers, No. 31881 for the year 1969).

It has been realized that the French judiciary has tended to condemn the familiar medical practices where surgeons administer local or total anaesthesia to patients before surgery without referring to a specialized anesthesiologist. As such, the judiciary has taken into consideration the issue of patients being exposed to the risks that may affect them during and after the anaesthesia, especially the jerky incidents caused by the anaesthesia, which may result in a heart attack that most probably leads to death (Al-Shawwa, 1993).

On the other hand, in a ruling of the Paris Court of Appeal, the anesthesiologist, not the surgeon, was convicted of unintentional murder. The facts of the case can be summarized as follows: A fall by an electrical engineer from a tower of electric wire resulted in a jaw fracture. Before the consequent surgery for the jaw fracture, the anaesthetist in the hospital entrusted the task of giving anaesthesia to an inexperienced nurse. This resulted in the patient being given an incorrect quantity of anaesthetic, resulting in his death. The court held that the death was caused as a result of medical malpractice.

Another important stage in medical work where liability needs to be established is when a patient is predominantly in a hopeless condition and is placed under artificial resuscitation equipment. In such a condition, the physician might stop the device attached to the patient after it has been installed, either based on a malpractice diagnosis by the physician or his belief that the patient's condition cannot hopefully be cured. What is the liability of the physician in this medical case?

There has been a trend in French jurisprudence to uphold penal liability towards the physician and his commission of the intended murder if he stopped the artificial resuscitation equipment from the patient whose recovery is not expected. The French jurisprudence, in this case, is based on the general rules of the Penal Code.

Some of the jurists in Egypt's legal framework have also supported the cases of penal liability of the physician for the crime of premeditated

murder caused by deliberately stopping the artificial resuscitation devices from the patient (Alrahawan, 2021). Based on this, a patient whose life is nearing its end is considered sacred and entitled to protection. Consequently, any individual who intentionally causes the termination of such a patient's life is subjected to punishment under the law (Saadery, 1977). On the other hand, some French courts in cases such as Cass.Crim.23 March 1953, Bull. Crim.104 D. 1953, 371 have also condemned the physician's refusal to help and to accept the patient, believing that the patient was dead without implementing any tests for claim confirmation (G'Sell-Macrez, 2011).

Among the most important stages of medical work is the post-treatment stage, in which a physician monitors a patient and follows up. It has important consequences for a patient's overall recovery, especially in surgical cases. In essence, the degree of success in patient monitoring is determined by the effectiveness of medical interventions in enhancing the patient's recovery compared to previous unsuccessful attempts at medical work (Duffy and Baldwin, 2013).

The French judiciary has taken an extended approach regarding the physician's commitment to monitoring the patient. The physicians are considered liable for lack of certainty while imparting medical care in connection with follow-up treatment and malpractice in implementing the instructions recommended. Accordingly, a physician is liable under such circumstances for the harm caused to the patient (Al-Shawwa, 1993).

Thus, examining penal liability for medical malpractice across the stages of diagnosis and treatment underscores the complex interplay of legal considerations in healthcare. From the crucial initial medical examination to treatment, surgery, and post-treatment monitoring, courts emphasize the importance of adhering to established standards of care. Cases highlight the consequences of misdiagnosis, negligence in treatment, and the need for specialized expertise, particularly in administering anaesthesia. The legal landscape also grapples with ethical dilemmas, such as the intentional cessation of life-sustaining measures. Throughout, the responsibility of physicians to provide diligent care has been a recurring theme, with courts holding



them accountable for malpractice that results in harm or death. However, the cases underscore the responsibility of physicians to provide diligent care, yet consistency and clarity in defining these responsibilities still need to be improved. As the legal system grapples with evolving medical practices, there is a need for more comprehensive and uniform guidelines to navigate the complex terrain of medical malpractice, ensuring a fair balance between patient safety, professional accountability, and legal standards.

*Penal liability arises from medical malpractice while transferring human organs among living humans and human inoculums:* In the last three decades, medical science has witnessed striking progress in human organ transplantation and the manufacture of human vaccines (Pulendran and Davis, 2020; Schlich, 2010; Chi et al., 2022). This has resulted in many medical and legal dilemmas, especially concerning the procedures for transferring human organs among living humans. Given the broad scope of the issues that need to be addressed in this respect, this study primarily focuses on the legality of such organ transfers, the transfer of gametes and human inoculums, and how modern legal legislation has addressed the challenge of regulating this parlous medical work. In this context, some Arab legislation has provided text on the meaning of human organs, including Federal Decree-Law No. 5/2016 of the United Arab Emirates, related to regulating the transfer and transplantation of human organs and tissues. "Organ": a group of interconnected human tissues and cells taken from living or dead that share vitality specific to the human body. "Whereas Article (12) of the same decree stipulates, according to Law No. 5 of 2016, that transferring organs, parts of them, or human tissues between a living person except as a donation and a person who enjoys his or her full eligibility is prohibited.

Moreover, Egyptian Law No. 5 of 2010 related to human organ transplantation in Article 2 stipulates: "It is prohibited to transfer any organ or part of an organ or tissue from the body of a living person to transplant it into the body of another human being, as an exception is made from this for necessity, which requires preserving the life of the recipient for treatment or treatment of a serious disease. In such cases, it has been stipulated that the transfer

is the only method to meet this necessity and that the transfer should not expose the donor to a serious danger to his life or health."

Therefore, it can be safely concluded that the contemporary legislation, including those in Egypt and the United Arab Emirates (UAE), demonstrates a deliberate effort to regulate organ transplant procedures by imposing specific conditions and controls. Recognizing the inherent risks involved with such operations serves as the driving force behind this regulatory strategy, emphasizing the need to put organ donor safety first. The underlying principle is to prevent the exploitation of human organs as commodities or subjects of trade within these legal frameworks. The emphasis on establishing clear conditions and controls reflects a commitment to ethical considerations and the safeguarding of individuals involved in organ transplantation processes. Most of the modern punitive legislation, such as Article 12 of Federal Decree-Law No. 5 of 2016 regulating the transfer and transplantation of human organs and tissues, Article 5 of Egyptian Legislation No. 5 of 2010 regarding human organ transplantation, and Article 1 of French Legislation No. 1181/76, stipulates that consent be obtained from the donor of the human organ and that the donor enjoys full will and capacity when agreeing to perform the donation process.

But a distinction must be made between two types of human organ donation from the human body, i.e., whether this donated organ is a vital organ in the donor's body and whether the donor's life depends on it. If this donated organ affects the donor's life, it is not permissible to transfer it, even if it is out of the donor's consent (Lopp, 2013). Therefore, if the organ was donated despite the donor's life being interrupted, this entails the penal liability of the physician who conducted the surgery (Salman, 2022).

Furthermore, human organs may not be included in the person's financial liability, and it is not permitted to deal with them in any financial consideration given to the donor because they are an extension of his physical health. As such, this approach has been confirmed by most modern legislation, such as Egyptian and Emirati legislation (Montgomery, 2002). Moreover, the physician should make donors and patients aware of the dangers of the human organ

transplant process, whether for their health or life; a donated patient's body may reject that newly donated organ (Castel, 1978).

Further, when we look at human products and derivatives, as well as human inoculations, in terms of the extent of the legality of their legal transfer, it is found that modern legislation has incorporated procedures related to honour and lineage. This is confirmed by the text of Egyptian Law No. 5 of 2010 regarding the regulation of organ transplantation, where Article 2 states that "it is prohibited to transplant organs, their parts, tissues, or reproductive cells in a way that leads to the mixing of lineages."

Some schools and jurisprudence trends in Europe have stated that "it is not permissible to use human gametes and zygotes, whether in scientific research and experiments or in preserving them; they have been founded on the fact that fertilization is of a dissimilar nature from others, it enjoys legal protection, and its manipulation is a violation of the dignity of its sanctification and the inviolability of infringement (Montgomery, 2002).

Another trend of jurisprudence went to the permissibility of dealing with human gametes and zygotes while giving them a measure of protection. It was based on the fact that describing a living human being is supposed to have some properties and certain features such as awareness and recognition. The lack of that in the zygotes negates the character of the human being and the zygote of humans of not having the minimum organic qualifications adopted to operate the nervous sense (Warren, 1973).

Many legal controls on such operations have been established in some European legislation, such as the British legislation on fertilization and human embryology (1990). The legislation has clarified many important terms in this domain and laid down the difference between human fertilization and pure gametes. Also, the French legislators have established the French Bioethics and Sciences Law No. 635,645 of 1994, which consists of some controls and restrictions on such operations.

The British legislation on fertilization and human embryology 1990 is distinguishable by the provision prohibiting and penalizing any practices degrading the dignity of humans, such as mixing human gametes with animal gametes, as well as prohibiting that the

subject of such operations be a commodity that is sold and bought for a fee, stipulating that it is not permitted to receive or pay any sums for the transfer of gametes or insemination from a man or a woman for a fee.

Despite some of the things that distinguished the British legislation on fertilization and human embryology in 1990, it hasn't mentioned the medical malpractices that physicians may fall into when performing such operations or specified the type of liability towards physicians in the absence of adherence to the legal rules that in turn govern this work. This is also applied to allow the formation and transfer of zygotes and gametes among people who do not have a legal relationship. However, it leads to the loss of many rights for the people involved.

Among the medical malpractices that can take place when transferring gametes and human zygotes are instances when a physician mixes tubes containing oocytes with other tubes or tubes containing male sperm with oocytes belonging to a woman other than his wife. This matter imposes penal liability on the physician performing such an operation due to his non-compliance with the technical and scientific principles dictated to him when doing this work. As well as medical malpractices in the cultivation of fertilized gametes, a physician commits a professional technical malpractice that results in the destruction of the fertilized gametes when they are implanted in a womb.

## CONCLUSION

The examination of contemporary legislation in Egypt and France has highlighted the pivotal role of malpractice in shaping the landscape of civil and criminal liability for medical practitioners. The convergence of penal and civil liability pivots on the concept of malpractice, with damages triggering civil responsibility. While French jurists debate whether to apply tort or contractual liability, the Egyptian Civil Code, particularly Article 1/164, establishes a person's liability for illegal actions absent compelling justification. The contractual nature of physician-patient relationships is evident in Egyptian jurisprudence, emphasizing diligence over guaranteed results. Despite the shared acknowledgement of malpractice, the diverse perspectives in these legal systems highlight

the ongoing complexity of defining the basis of medical malpractice liability, leaving room for further diligence on the penal liability for medical malpractice. From initial examinations to post-treatment monitoring, courts stress adherence to care standards. Instances like misdiagnosis and negligence underscore the responsibility of physicians, yet a need for uniformity in defining these obligations persists.

The last three decades have witnessed remarkable progress in medical science, particularly in human organ transplantation and vaccine development, leading to significant medical and legal challenges. This study focused on the legality of organ transfers, gamete transfers, and human inoculums, examining how modern legal legislation, such as those in Egypt and the United Arab Emirates (UAE), has responded to the intricate task of regulating these critical medical procedures.

The contemporary legislation in Egypt and the UAE demonstrates a deliberate effort to regulate organ transplant procedures by imposing specific conditions and controls. Motivated by the recognition of the inherent risks associated with such operations, the emphasis is on prioritizing the safety of organ donors and preventing the commodification of human organs. Consent is a cornerstone in these legal frameworks, with modern punitive legislation stipulating that consent must be obtained from the donor, who should have full will and capacity during the donation process. Further, the distinctions between vital and non-vital organ donation add complexity, highlighting the impermissibility of transferring vital organs even with donor consent. Violations of these regulations can lead to penal liability for physicians.

Furthermore, financial considerations related to human organs are strictly prohibited, and physicians must inform donors and patients about the potential dangers of organ transplant procedures. Examining human products, derivatives, and inoculations reveals that modern legislation has incorporated measures related to honour and lineage. This is evident in the prohibition of transplanting organs, tissues, or reproductive cells in a way that leads to mixing lineages, as stated in Egyptian Law No. 5 of 2010. European jurisprudence trends vary, with some schools emphasizing the impermissibility of using human gametes and zygotes in scientific research,

considering them deserving of legal protection. Others allow dealings with gametes and zygotes, subject to certain protections based on the absence of certain essential human characteristics in these early stages.

However, there is a notable gap in addressing medical malpractices in some legislation, like the British legislation on fertilization and human embryology (1990), which does not explicitly mention the liability of physicians for malpractices. This gap raises concerns about potential legal ambiguities and underscores the need for more comprehensive regulations. Medical mistakes made when transferring gametes and human zygotes, like mixing tubes with oocytes, can also lead to doctors being punished for not following technical and scientific rules.

This comprehensive analysis reveals the evolving landscape of legal responses to complex medical procedures. While legislation aims to balance technological advancements, ethical considerations, and the protection of individual rights, ongoing efforts are necessary to address emerging challenges, ensure clarity in legal frameworks, and uphold the highest standards of medical ethics and patient well-being.

In conclusion, the assessment of medical malpractice hinges on diverse medical, technical, and legal criteria, varying across legislative systems. The distinction between penal and civil liability underscores a fundamental difference, with penal liability relying on awareness, consciousness, and intention, while civil liability centers on the presence of malpractice and resultant harm. Notably, penal liability for medical malpractices extends across all stages of medical work, from diagnosis to treatment and post-treatment, contingent on elements impacting physician liability. Universally, comparative penal laws concur in penalizing the trafficking of human organs, gametes, or inoculums, emphasizing their inherent value beyond any financial considerations and emphasizing the preservation of human dignity.

### **Recommendations**

Based on the nuanced analysis of contemporary legislation in Egypt and France, particularly in the context of medical malpractice, organ transplantation, and advanced medical procedures, the following recommendations are put forth to enhance legal

frameworks and address emerging challenges:

#### **Harmonization of definitions and standards**

There is a pressing need for international collaboration and harmonization of definitions and standards related to medical malpractice. By fostering a common understanding, legal systems globally can reduce ambiguities, promote consistency, and facilitate the fair determination of liability in the face of evolving medical practices. To ensure a comprehensive and up-to-date assessment of a physician's liability, emphasis needs to be put on prioritizing the incorporation of the latest medical technology at all stages of medical work, including diagnosis, treatment, and post-treatment monitoring, to ensure a thorough and up-to-date evaluation of physician liability for medical malpractices.

#### **Comprehensive legislation on medical malpractice**

Legislations should explicitly address medical malpractice, leaving no room for legal ambiguities. A comprehensive legal framework should be established, clearly outlining the responsibilities and liabilities of physicians throughout all stages of medical work, from diagnosis to post-treatment monitoring.

#### **Global best practices for advanced medical procedures**

With the rapid progress in medical science, including organ transplantation and vaccine development, it is essential to establish global best practices for advanced medical procedures. International bodies and legal experts should collaborate to develop guidelines addressing cutting-edge medical interventions' ethical and legal aspects, ensuring a standardized and ethical approach worldwide.

#### **Continuous review and adaptation**

Given the dynamic nature of medical advancements and legal landscapes, legislation must be subject to continuous review and adaptation. Regular updates will enable legal systems to keep pace with emerging challenges, technological developments, and evolving ethical considerations, ensuring the laws remain relevant and effective.

#### **Public awareness and education**

There should be proactive efforts to enhance public awareness and education to reinforce the importance of informed consent and ethical considerations in medical procedures. This involves campaigns,

informational programs, and educational initiatives that empower individuals to make informed decisions about their healthcare while fostering a better understanding of medical ethics.

In summary, these recommendations aim to foster a global legal environment responsive to the complexities of contemporary medical practices, uphold ethical standards, ensure patient well-being, and clarify liability. Implementing these measures will contribute to a more robust and adaptable legal framework that aligns with the evolving landscape of medicine and technology.

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