



Medico-Legal Aspect of Emerging Issues during COVID- 19 Outbreaks

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Abstract

The increasing spread of COVID-19 infection in the world led to emerging controversial medico-legal issues. These issues are varied wherein some of them are related to medical ethics and the relationship between physician and patient while others are related to medical responsibility and malpractice. In addition, there are medico-legal issues emerging related to the occupational hazards of COVID-19 infection in the workplace. However, accelerating efforts being done for securing treatment and vaccine leading to the breaching of known rules of the scientific research ethics are another medico-legal issue. Furthermore, the conduction of autopsy for COVID-19 cases creates controversial issue because of the survival period of the COVID -19 virus in different body samples after the death that is not determined until now. Therefore, the conduction of autopsy using the biosafety measures is recommended wherein autopsy has an important role in detecting pathological findings of COVID -19 infection that are still unknown.

Keywords: COVID-19; Issues; Medico-Legal

Introduction

It is known that COVID -19 infection outbreaks originated in a Chinese Wuhan and then it spread quickly worldwide. COVID -19 is mainly transmitted by air droplets causing severe and fatal human illness involving mainly the respiratory system and extend to other organs causing a high mortality rate especially in the patients who have risk factors [1]. So, COVID -19 infections caused a major health crisis in the world because of the rapid spread, confusion about its pathogenesis, unidentified treatment and vaccination. Thus, all efforts of health and scientific agencies are done in accelerating steps attempting to compensate for a shortage of knowledge about this new virus and discover its characters to find a specific treatment and vaccine [2].

In this context, there is no doubt that the accelerating and increasing spread of the COVID -19 pandemic has led

to overriding a lot of axioms on which the medical practice was based from years ago, that led to controversy and the emergence of controversial medico-legal issues [3]. These issues are mainly related to the relationship between physician and patient including the rights and duties of each of them during the examination of the cases infected with COVID -19. Furthermore, there is also a debate related to therapeutic protocols, painstaking and accelerating attempts in the world that try to find a vaccination protecting humanity from the danger of this epidemic [4].

In addition, another debate was originated about the medico-legal aspect of the COVID-19 infection in the workplace especially after a large number of healthcare professionals get an infection in the world. Therefore, it may be considered one of the occupational health challenges nowadays and then COVID-19 infection may be classified as an occupational incident leading to temporary and

permanent disability, and then death [5]. Moreover, it is possible that the victim of COVID-19 infection claims to get the disease because of the shortage of biosafety and preventive measures in the workplace to gain compensation. So, WHO indicated that health workers who are infected by COVID-19 in the workplace should have a right to get compensation, rehabilitation, and medical services because of this occupational incident [6].

Furthermore and on another side, there are other issues about how to deal with the corpse of the deceased with COVID-19 and how to perform the autopsy. Therefore, in this review, we try to address these issues that have recently arisen during the dealing with this pandemic from the medico-legal point of view.

Medical Ethics Issues

It is noticed that the attitude and behavior of the patients of COVID-19 and their relatives are varied wherever some people have panic for the fear of infection spread while others feel a shame trying to cover up the infected cases. Thus, the physicians face a challenge during the examination of the COVID -19 cases. Medico-legally, it is known that confidentiality and maintaining professional secrecy are main principles in the relationship between physician and patient during physical examination wherein it is prohibited for the physician to disclose the professional secret such as publishing the patient's name or any information belong his condition to maintain his privacy [7]. But there is a medico-legal exception for the above mentioned medical ethics rules in the cases of COVID -19 infection because it is permitted for the physician to disclose the professional secret and notify the public authority and the relatives about the condition of the patient for the quarantine to prevent the spread of infection. Noteworthy, this exception is applied for all the cases of infectious diseases and without the gained consent of patient [8].

In another approach, the frenzied and accelerated attempts to secure a coronavirus vaccine without being bound by the scientific steps followed in such researches and without being bound by the necessary and enough clinical trials are considered a breach of the scientific research ethics. In more detail, the expected harm that will be inflicted on the patients is more than the desired benefit even if there is a pressing necessity because of the accelerating widespread infection. Thus, this approach is considered against the known rules of scientific research ethics [9].

However, it should prioritize COVID-19-related research because of its clinical urgency, but researchers should apply the same known standardized criteria for the research methodology and scientific research ethics. Therefore, it

should keep on the research ethics rules especially that are related to the consent and safety of participants in the research projects ensuring transparency, the validity of the research methodology, and scrutiny of the results [10].

In the related context, the allocation of scarce healthcare resources and the equivalence of withholding and withdrawing medical interventions is one of the ethical dilemmas that emerged during the COVID-19 pandemic [11]. So, the applied guidelines in the health care system of some countries for allocation of the life-saving ventilators during this pandemic were unacceptable ethically [12].

Thus, the healthcare providers should commit and apply the principles of medical ethics in the outpatient clinics and intensive care units during the time of the COVID-19 pandemic especially when the available resources are limited. These principles are based on equal treating for all people prioritizing the patients according to the severity of their conditions and maximizing the benefits of the scarce resources [13]. Furthermore, there is an ethical strategy in epidemics, emergencies, and disasters that is recommended and authorized by WHO that includes triage criteria based on saving the greatest number of people, protecting the most vulnerable, equal access, the priority for the most important, and first come, first served [14].

Medical Responsibility and Malpractice Issues

Firstly, COVID -19 patients has a right to be examined and diagnosed by a physician. Thus, it is not the right of the physician to refuse the examination of a COVID- 19 patient because of his fear to be infected because it is an emergency case. So, the physician should do his duty by following the necessary precautions and biosafety measures [15]. Furthermore, it is also the right of the patient of COVID -19 to receive a scientifically recognized treatment with proven efficacy and known of its potential side effects. Unfortunately, this treatment is not available until now. However, the commitment of the physicians to apply some therapeutic protocols that are authorized via some official health agencies such as WHO is not considered malpractice in the COVID-19 outbreak, but the using of other herbal medications or that is called alternative medicine that is used by non-professionals is considered medical malpractice. Moreover, using any unauthorized drug or therapy in treating the cases of COVID-19 is also considered medical malpractice [16].

From a medico-legal point of view, medical responsibility has well-established pillars that determine the physician-patient relationship. The pillars of medical responsibility consist of competency that is identified via an official certificate and national professional license to practice,

consent of the patient besides that the main target of the physician should be treating and curing the patient exerting great care without any another target such as using a new therapy as experimentation. But, the consent of the patient is not necessary in COVID-19 infection cases because it is considered an emergency case [17].

In more detail, the responsibility of physician for COVID-19 cases is to do his best to present great care according to the documented and authorized medical rules but he cannot ensure the cure [18]. However, medical malpractice emerges if the physician performs a procedure or prescribes a medication for the patient leading to harm for the patient with the presence of an identified causation connection between the act (error) and the harm (result). So, the use of any unauthorized therapy for treating COVID-19 cases is considered a medical error that may lead to possible related harm [19].

In addition, the term medical negligence means a breach of standards of the provided care, the rights of the patient, and the physicians' duties. So, the health care provider deserve the medical negligence charge, if the provided care to the patient is unaccepted for the standards of the medical practice, or there is an omission or act from the medical professional leading to endangering the safety and life of the patient. Noteworthy, the level of medical professionals' competency is judged by the standards of the specialty via assessing the action of other professionals in the same situation. In the time of the pandemic, any negligent action may spread COVID-19 infection such as breach of biosafety measures in the hospitals is considered medical negligence [20].

Autopsy Conduction of COVID-19 Cases

If there is an urgent medico-legal necessity to conduct postmortem examination and autopsy for COVID -19 cases, the forensic expert should remind himself how to apply biosafety measures. Firstly, the forensic expert should assess the risk and apply the universal standard precautions and the suitable operating procedures for the postmortem examination of COVID-19 cases. Thus, Personal protective equipment and adequate ventilation in a separate negative-pressure autopsy room are vital besides a suitable infrastructure of the autopsy room [21].

Second, the first target of conducting an autopsy in a forensic case is the identification of the cause of death. Thus, it should identify the pathogenesis process and the possible postmortem findings in these cases. So, if this forensic case is suspected or confirmed COVID-19 infection, it should conduct an appropriate autopsy by the forensic expert based on the available epidemiological data because this is a legal

duty and then he can't refuse or withdraw [22].

In addition, the available data about the pathological findings of COVID -19 infections is limited, so it should take diagnostic samples to verify the infection. Until now, there are not specific or pathognomonic findings for COVID-19 infection; it may be pleurisy, lung consolidation, diffuse alveolar damage, pulmonary oedema, increase of the lung weight, and pericarditis besides pneumocyte hyperplasia, focal inflammation, hyaline membrane formation, multinucleated giant cell formation, and platelet-fibrin thrombi in small arterial vessels [23].

However, in widespread infections, non - invasive autopsy is recommended for retrieving necessary fluid and tissue samples, but it is not enough in a local and regional infection. So, it should be combined with postmortem imaging such as CT scan for postmortem diagnosis. The required diagnostic postmortem samples of COVID-19 infection are 5 m of plain blood without additive for serology, nose and throat swabs, and bronchoalveolar lavage or sputum besides other routine samples under the sterile conditions [24].

Noteworthy, the role of the forensic expert is to conduct a legal autopsy in the criminal cases only, but somebodies want to give a promotion for the role of the forensic expert during this pandemic via sharing the pathological findings of comprehensive postmortem examination of COVID-19 cases to compensate shortcoming of the available information about the pathogenesis mechanism of this infection showing the role of other risk factors and other affected organs wherein COVID-19 is not restricted to respiratory system only [25].

In this context, there is a question that presents itself and has no legal answer, but it may have a moral significance or medical ethical aspect: Should privacy of the deceased with COVID-19 infection be preserved by preventing the postmortem findings sharing that were detected via the autopsy in light of the scarcity of information about this pandemic? [26].

In another context, postmortem examination may play an important role for an estimation of the potential risk of infection spread to other people after the death wherein the survival period of the COVID -19 virus in different body samples after the death is not determined until now [27,28].

Conclusion

COVID -19 infections caused a major health crisis in the world creating many challenges and issues because of its rapid spread, confusion about its pathogenesis, unidentified treatment and vaccination. So, there are some medico-legal

issues that are arisen during this pandemic such as medical ethics issues that are related to the relationship between physician and patient. In addition, the scientific research ethics that was breached for a rapid securing of the new vaccine besides medical responsibility and malpractice issues related to the COVID-19 pandemic. Moreover, COVID-19 infection is considered an occupational hazard in the workplace causing another medico-legal issue. Lastly, the undetermined survival period of the COVID -19 virus in different body samples after death is a medico-legal issue emerging during autopsy conduction of COVID-19 cases.

Declaration of Conflicting Interests

The author declares that there is no conflict of interest.

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