

### **Original Article**

### **COVID-19 Pandemic: Ethical Challenges of Healthcare and Research**

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#### **ABSTRACT**

COVID-19 pandemic provokes a lot of ethical debates. Infected patients deserve appropriate medical support. The protection of health care providers and community members must be also considered. Achievement of the balance between patients' rights, frontline response workers (FRWs) rights, and communities' needs should be in agreement with medical ethics foundations. Patients with infectious diseases should be managed according to ethical principles; autonomy, beneficence, non-maleficence, and justice. COVID-19 infected patient has the right of acceptance or refusal of treatment. Nevertheless, the refusal of quarantine and infection control measures is not an option. To the moment, a lack of effective treatment for COVID-19 infection justifies the implementation of monitored emergency use of unregistered and experimental interventions (MEURI) if approved by the relevant authorities. Regarding critically ill COVID-19 infected cases, Egyptian law and Islamic jurisprudence incriminate all kinds of euthanasia and physician-assisted suicide. FRWs should not refuse treatment of COVID-19 infected persons and they must take the utmost safety precautions to avoid infection. In COVID-19 infection breaching confidentiality to the health authority is a legal and ethical obligation. Regarding research, there is an urgent need for innovation of drugs or vaccines to control COVID-19 infection and the steps of the ethics of research might not be exactly followed. Thus, researchers must adhere to policies approved by Research Ethics Boards (REBs) during the crisis.

**KEYWORDS:** COVID-19; Pandemic; Ethical challenges; Ethics of healthcare; Ethics of research.

### **INTRODUCTION**

COVID-19 creates a catastrophic pandemic. The increasing number of patients infected with the virus overload the medical care services and create medical and ethical

challenges. Medical ethics should consider the protection of health care providers and the community along with the preservation of the

patient's rights. The infected patients are considered as victims and vectors of COVID-

19 at the same time, this might provoke ethical debates concerning medical care in such communicable diseases (Battin et al., 2009; American Dental Association, 2020).

#### **COVID-19** and ethical challenges:

- The protection of the community and medical care providers is a priority. Thus, patient rights should be governed to prevent dissemination of infection to others (Battin et al., 2009).
  - The COVID-19 infection creates high morbidities and mortalities that burden the medical care facilities. Unfortunately, vulnerable populations are prone to receive unequal care (Battin et al., 2009).
  - Lack of an effective vaccine or treatment of the COVID-19 infection along with mass causalities encourages the conduction of clinical trials. However, the ethical rules of research might be violated in pandemic circumstances (Nuffield Council in Bioethics, 2020).

Therefore, there is a need for a summarized fast-tracked ethics review that illustrates the frequent ethical issues of health care and research related to the COVID-19 pandemic.

# A) COVID-19 AND ETHICS OF HEALTHCARE:

#### 1) Rights and obligations of patients:

The patient must respect all safety rules to prevent the spread of the infection to medical staff and other community members. The public health care measures could be infringed upon the patient's rights of autonomy and liberties. The rights of the patients with COVID-19 infection are preserved but with special ethical considerations (BMA Medical Ethics, 2013).

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#### 1. Autonomy

Autonomy is expressed as the right of the patient to make informed decisions regarding his/her medical care. Autonomy comprises disclosure and obtaining informed consent from a competent patient with normal decision-making capacity. Also, autonomy includes respect for patient's confidentiality (BMA Medical Ethics, 2013).

#### a. Disclosure:

The patient with COVID-19 infection has a right to know all relevant information regarding his/her condition that includes diagnosis, treatment strategies, and prognosis (National Bioethics Commission of Mexico, 2020).

#### **b.** Informed consent:

No consent is required for the management of COVID-19 infection patients in emergencies. Patients might arrive at hospitals in critical condition that necessitates the initiation of life-saving measures (Selgelid, 2005). However, the competent adult with an infection such as

COVID-19 has a full right to accept or refuse treatment. Nevertheless, refusal of isolation or quarantine and following infection control measures is not an option (Kim, 2016; Janwadkar and Bibler, 2020).

#### c. Decision-making Capacity:

Autonomous decisions could be provided only by competent adults. Therefore, minors (under the age of 18 years) or adults with impaired mental functions are unable to provide valid consent. The capacity for deciding in healthcare management consists of understanding, appreciation, reasoning, and expression of the decision. Therefore, parents or legal guardians give consent for the children and legal representatives give consent for those with impaired mental faculties (Kim, 2016).

#### d. Confidentiality:

Respect patient autonomy and privacy necessitate keeping the data of the patients confidential. However, in COVID-19 infection breaching confidentiality to the local health authority is a legal and ethical obligation. Early isolation and treatment of infected patients prevent transmissibility of the viral infection to the community population. Nevertheless, other aspects of confidentiality should be respected. The confidentiality extended to cover personalized data of COVID-19 infection patients. It is unethical to demonstrate photos or videos that allow personal identification of COVID-19 patients on TV channels or social media. The patient's right to confidentiality is an ethical and moral code that extended even after death (Kim, 2016; British Medical Association, 2020).

#### 2. Beneficence and non-maleficence

The ethical principle of beneficence is actions done for the benefit of patients and non-maleficence means not harming patients. In COVID-19 infection, there is a lack of therapeutic or prophylactic medications of proven efficiency and safety. Thus, the implementation of monitored emergency use of unregistered and experimental interventions (MEURI) is justifiable, if approved by the relevant authorities and ethics committees and after taking informed consent from the patients (World Health Organization, 2020 a).

#### 3. Justice:

The Convention on the Rights of Persons with Disabilities of the United Nations (2006) stated their rights of non-discrimination and equality of opportunity and services without restriction. The imbalance between needs and the available resources in this current COVID-19 pandemic can be overcome by the correct application of triage for optimization of resource allocation. Respecting every human life without selection based on age, gender, ethnicity, social status or disability is the

fundamental ethical principle and any breach to these principles is considered a violation of human rights (United Nations Convention on the Rights of Persons with Disabilities, 2006).

Besides, being infected with COVID-19 might be stigmatizing in some cultures and the patient might be treated with revulsion. All medical staff should treat all the patients with respect which is the ethical core of medical practice (Aachary and Shah, 2020).

# COVID-19 and ethics of critically ill patients:

#### • End-of-life decisions:

The ethics of end-of-life decisions of serious diseases including COVID-19 infection attracted wide debate. Euthanasia physician-assisted suicide are unethical and illegal practices in nearly all countries except in Switzerland and the Netherlands. Generally, euthanasia (mercy killing) is ending the patient's life upon his/her consent in a painless manner to relieve intractable suffering. Active euthanasia includes the administration of lethal pharmaceutical agents, whereas passive euthanasia is the cessation of providing medical care in an attempt to enhance death. On the other hand, physician-assisted suicide is the practice committed by the patient how selfadminister fatal medication prescribed by physicians to end his/her own life (Tadros et al., 2011; Saadery, 2014).

In Islam, human life is a holy gift. The Quran states that saving one life is the same as saving all the lives. Thus, Egyptian law and Islamic jurisprudence prohibited the intentional ending of human life whatever the motives. Therefore, patients infected with COVID-19 or with other infectious diseases have full right of life preservation, and any attempts of the deliberate ending of their lives are incriminated by law (Saadery, 2014; Meyfroidt et al., 2020).

# • Withdrawing life-sustaining treatments (for ongoing treatment):

Every competent adult with the full capacity to understand all dimensions of the disease has the right to autonomy. If the patient with COVID-19 infection refused treatment including assisted ventilation his/her wish should be respected. However, the physician should be sure that the patient understands the possible sequelae of refusal of treatment (Professional Medical ethics in Egypt, 2003; Meyfroidt et al., 2020).

#### • Advance directive:

An advance directive is a manner by which the patient communicates his/her preferences and wishes regarding health care in advance of becoming unable to make decisions. Advance directives are documented by competent adults with full decision-making capacity (Caals et al., 2017; Meyfroidt et al., 2020).

# 2) Rights and obligations the frontline response workers

Frontline response workers (FRWs) are those with high-risk probability to attract infection because of their jobs. They include teamwork of healthcare providers, ambulance drivers, as well as, workers outside the healthcare sector as sanitation workers, funeral directors, and burial teams. It was well known that health workers are much more vulnerable to infection than the general population (Rosenbaum, 2020).

Frontline response workers should not refuse treatment of COVID-19 infected persons for fear of catching the infection. They must take the utmost safety precautions to protect themselves from being infected. It is crucial to determining the scope of their duties, as well as, their rights. Work obligations should be assigned only if the anticipated public health benefits exceed the risks to which health workers are exposed. Furthermore, the duties should be based on equity and transparency (Solnica et al., 2020).

Medical practitioners must report cases of COVID-19 infection to authorities, without taking consent from the infected individual as the risk from the spread of a serious communicable disease outweighs the respect of personal privacy or confidentiality (Menon and Padhy, 2020).

The rights of health care providers include adequate training and accessibility to personal protective equipment (PPE). All necessary procedures and measures must be taken to decrease the infection risks. Together with their rights of appropriate remuneration and their priority to access appropriate healthcare if the FRW or even a related family member gets infected, in addition to their family benefits in case of health worker death (Menon and Padhy, 2020; Rosenbaum, 2020).

# B) COVID-19 AND ETHICS OF RESEARCH:

An additional duty of health care providers is to support scientific research and surveillance through rapid honest sharing of medical and clinical data considering patient care. Resources and funds should never be diverted from patient care to research. Surveillance generates generalizable knowledge and helps in the assessment of the magnitude of the problem (Keusch, and MacAdam, 2017).

During the COVID-19 pandemic, the researchers should maintain complying with the applicable regulatory requirements, and adhere to Good Clinical Practice (GCP) and the ethical codes. The written informed consent for research should be obtained from competent patients. However, in emergency conditions with no available prior consent of the subject, the consent could be obtained by a legal

representative. In the absence of the subject's legally acceptable representative, enrolment of the patient requires adherence to the policies approved by Research Ethics Boards (REBs), to protect the rights of the patient, and to ensure compliance with ethical standards of research. To limit COVID-19 transmissibility by shared pens and written consent documents signed by infected patients, consents could be obtained by electronic methods or orally by videoconference (Health Research Authority NHS, 2020; Research ethics BC, 2020).

Rapid data sharing can help scientific progress with the prevention of duplication of research, in addition to saving efforts, time, and money. Through shared data, evaluation of existing or novel treatment can be done; disease spread or prognosis can be anticipated. However, avoiding the premature release of any inclusive data is also mandatory (Nicholas, 2020).

During pandemics, an ethical obligation for the researchers to share data before publication in academic journals should be fulfilled, despite many barriers and challenges to do that. These challenges are represented by concerns about intellectual property, refusal of journal publication after data dissemination, so, academic journals should facilitate this. Moreover, academic publishers should tear down their paywalls if the research deals with COVID-19 innovative solutions. Another barrier is the commodity-driven benefits of pharmaceutical companies that funded the research; this can be solved by contractual agreement with WHO (World Health Organization, 2020 b; Xitao et al., 2020).

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#### **CONCLUSION**

COVID-19 infected patients are victims that deserve appropriate medical and psychological support. However, these victims are also vectors and the protection of the community must be considered. The frontline response workers are the cornerstone in the management of COVID-19 pandemic and their safety is of national concern. In pandemic circumstances, there is an urgent need for innovation of drugs or vaccines for commercial and humanitarian purposes. Therefore, the steps of the ethics of research could not be followed in many cases. However, the balance between patient's rights and communities' needs should be carefully considered during COVID-19 pandemic and any other similar crisis.

#### ETHICS DECLARATION:

The current article was approved by the Ethics Committee of Faculty of Medicine, Alexandria University (IRB Number: 00012098, FWA Number: 0018699, Approval serial number: 0304704).

#### **REFERENCES:**

COVID-19 Pandemic: Ethica 7

- Aachary, R. and Shah, A. (2020): Ethical dimensions of stigma and discrimination in Nepal during COVID-19 pandemic. Ethics, Medicine and Public Health. doi.org/10.1016/j.jemep.2020.100536.
- American Dental Association (2020): Guidance on continuing to practice ethically during COVID-19. Available at: <a href="https://success.ada.org/~/media/CPS/Files/C">https://success.ada.org/~/media/CPS/Files/C</a>
  OVID/ADA COVID How Do I Ethically Se e Patients During Pandemic.pdf. [Last accessed online on 22 July 2020].
- Battin, M., Francis, L., Jacobson, J. and Smith, C. (2009): The patient as victim and vector: ethics and infectious disease. JAC; 64: 670.
- BMA Medical Ethics. Everyday medical ethics and law. (2013): A practical approach to ethics. UK: Wiley-Blackwell. Available at :https://onlinelibrary.wiley.com/doi/book/10.10 02/9781118384855. [Last accessed online on 8 August 2020].
- British Medical Association. (2020): COVID-19: Ethical issues. A guidance note. Available at: https://www.bma.org.uk/media/2226/bma-covid-19-ethics-guidance.pdf. [Last accessed online on 11 July 2020].
- Caals, K., Saxena, A. and Wlho, C. (2017): Ethics of epidemics, research and surveillance: a WHO workshop report. Asian Bioethics Review; 9: 265-271.

- Health Research Authority NHS. (2020): Seeking consent in COVID-19 research. Available at: <a href="https://www.hra.nhs.uk/covid-19-research/seeking-consent-covid-19-research">https://www.hra.nhs.uk/covid-19-research</a>. [Last accessed online on 8 August 2020].
- Janwadkar, A. and Bibler, T. (2020): Ethical challenges in advance care planning during the COVID-19 pandemic, The American Journal of Bioethics; 20: 202-204. doi: 10.1080/15265161.2020.1779855
- Keusch, G. and MacAdam, K. (2017): Clinical trials during epidemics. Lancet; 389: 2455–2457.
- Kim, O. (2016): Ethical Perspectives on the Middle East Respiratory Syndrome Coronavirus Epidemic in Korea. J Prev Med Public Health; 49:18-22.
- Menon, V. and Padhy, K,. (2020): Ethical dilemmas faced by health care workers during COVID-19 pandemic: Issues, implications and suggestions. Asian journal of psychiatry. doi.org/10.1016/j.ajp.2020.102116
- Meyfroidt, G., Vlieghe, E., Biston, P., De Decker, K., Wittebole, X., Collin, V., Depuydt, P., et al. (2020): Ethical principles concerning proportionality of critical care during the COVID-19 pandemic: advice by the Belgian Society of IC medicine. Available at: <a href="https://www.hartcentrumhasselt.be/professionee">https://www.hartcentrumhasselt.be/professionee</a> <a href="https://www.hartcentrumhasselt.be/professionee

- during-the-covid-19-pandemic-advice-by-the-belgian-society-of-ic-medicine. [Last accessed online on 28 July 2020].
- National Bioethics Commission of Mexico. (2020):

  Recommendations regarding the COVID 19

  pandemic, from a bioethical approach.

  Available

  at: <a href="https://www.gob.mx/cms/uploads/attachment/file/544828/Recommendations\_regarding\_the\_">https://www.gob.mx/cms/uploads/attachment/file/544828/Recommendations\_regarding\_the\_</a>

  COVID-19

  pandemic from a bioethical approach 1.pdf.

  [Last accessed online on 20 July 2020].
- Nicholas, E. (2020): COVID-19: the ethics of clinical research in quarantine BMJ. doi: <a href="https://org/10.1136/bmj.m2060">org/10.1136/bmj.m2060</a>.
- Nuffield Council in Bioethics. (2020): Ethical considerations in responding to the COVID-19 pandemic. Available at: <a href="https://www.nuffieldbioethics.org/assets/pdfs/Ethical-considerations-in-responding-to-the">https://www.nuffieldbioethics.org/assets/pdfs/Ethical-considerations-in-responding-to-the</a>
  <a href="COVID-19-pandemic.pdf">COVID-19-pandemic.pdf</a>. [Last accessed online on 11 July 2020].
- Professional Medical ethics in Egypt (2003): Issued by the decision of Minister of Health and Population. ( Act No. 238 of 2003 dated 5 September 2003 After the offer and approval of General Assembly and sub-unions conference for Egyptian doctors).
- Research ethics BC. (2020): Guidance notes and regulatory requirements for informed consent in research during a pandemic: COVID-19.

Available at: <a href="https://researchethicsbc.ca/wp-content/uploads/2020/03/GUIDANCE-NOTES-ONINFORMEDCONSENTDURINGPANDE">https://researchethicsbc.ca/wp-content/uploads/2020/03/GUIDANCE-NOTES-ONINFORMEDCONSENTDURINGPANDE</a>
MIC\_CTBC\_Fraser-Health\_REBC.pdf.

[Last accessed online on 8 August 2020].

- Rosenbaum, L., (2020): Facing Covid-19 in Italy ethics, logistics, and therapeutics on the epidemic's front line. The new England Journal of Medicine. Available at: <a href="https://www.nejm.org/doi/full/10.1056/NEJMp">https://www.nejm.org/doi/full/10.1056/NEJMp</a> 2005492. [Last accessed online on 28 July 2020].
- Saadery, B. (2014): Euthanasia in Iranian and Egypt law. European Scientific Journal; 2: 203-206.
- Selgelid, M. (2005): Ethics and infectious disease. Bioethics; 19(3): 273-288.
- Solnica, A., Barski, L. and Jotkowitz, A. (2020): The healthcare worker at risk during the COVID-19 pandemic: a Jewish ethical perspective. Journal of Medical Ethics; 46: 441-443.
- Tadros, G., Rakhawy, M., Khoweiled, A., El-Houssini, A. and Khan, F. (2011): Perception of physician-assisted suicide among Egyptian psychiatrists: cultural perspective. The Psychiatrist (2011), 35, 15-18. doi: 10.1192/pb.bp.110.030411
- United Nations Convention on the Rights of Persons with Disabilities. (2006): Available at:

<u>https://www.un.org/disabilities/documents/convention/convention\_accessible\_pdf.pdf.</u>

[Last accessed online on 28 July 2020].

World Health Organization. (2020 a): Emergency use of unproven interventions outside of research Ethics guidance for the COVID-19 pandemic. Available at: <a href="mailto:file:///C:/Users/hp/Downloads/Emergency-interventions-ethics-COVID-19.pdf">file:///C:/Users/hp/Downloads/Emergency-interventions-ethics-COVID-19.pdf</a>.[Last accessed online on 8 August 2020].

World Health Organization. (2020 b): National ethics committees and COVID-19. Available from: <a href="https://www.who.int/news-room/detail/04-04-2020-national-ethics-committees-and-covid-19">https://www.who.int/news-room/detail/04-04-2020-national-ethics-committees-and-covid-19</a>. [Last accessed online on 29 July 2020].

Xitao, M., Yanqiao, W., Tian, G., He, Q., He, Y., Yue, R and Tang, J. (2020): Challenges and strategies to research ethics in conducting COVID-19 research. J Evid Based Med; 13(2): 173-177.

## جائحة كوفيد- ١٩: التحديات الأخلاقية في الرعاية الصحية و البحث العلمي

د. زهراء خليفة صبح ، اد. أسماء سعيد البنا

### قسم الطب الشرعى و السموم الإكلينيكية، كلية الطب، جامعة الإسكندرية، مصر

تواجه التعاملات الطبية في ظل جائحة كوفيد - ١٩ الكثير من التحديات الأخلاقية، حيث ينبغي أن يتلقى المرضى المصابون الدعم الطبي الملائم، بينما يجب أيضًا حماية مقدمي الرعاية الصحية وأفراد المجتمع أثناء هذه الجائحة. لذلك، ينبغي الموازنة بين حقوق المرضى وحقوق الطاقم الطبي ومتطلبات المجتمعات بما يتماشى مع الأخلاقيات الطبية. فيما يتعلق بالتعامل مع المرضى المصابين بأمراض معدية، يجب أن تراعى مبادئ الأخلاقيات الطبية كالإستقلالية والإحسان وعدم الإساءة والعدالة. فللمريض المصاب بفيروس كوفيد - ١٩ الحق في قبول أو رفض العلاج ومع ذلك فلا يحق له بأي حال رفض الحجر الصحي أوعدم إتباع تدابير مكافحة العدوى. و حتى الأن لم يتم التوصل لعلاج فعال لكوفيد- ١٩ مما يعطي الحق في الإستخدام الطارئ التدخلات التجريبية غير المسجلة والتي تمت الموافقة عليها من قبل السلطات المختصة. و لا يحق لمقدمي الخدمة الطبية رفض علاج الأشخاص المصابين بـ كوفيد- ١٩ وعليهم إتخاذ أقصى تدابير السلامة لتجنب العدوى. و يعد إبلاغ السلطة الصحية بحالات عدوى كوفيد- بـ كوفيد- ١٩ والخلاقيًا. بالنسبة للحالات الحرجة المصابة بالفيروس، يجرم القانون المصري والفقه الإسلامي جميع أنواع القتل الرحيم والإنتحار بمساعدة الطبيب. أما فيما يتعلق بالبحث العلمي، فهناك حاجة ملحة لإبتكار عقاقير أو لقاحات للسيطرة على وباء كوفيد- ١٩ و خلال الأزمة الراهنة قد لا يكون ممكنًا إتباع كافة خطوات البحث العلمي ، لذلك يجب على الباحثين الإلتزام بالسياسات المعتمدة من قبل مجالس أخلاقيات البحث العلمي. للعلمي ، لذلك يجب على الباحثين الإلتزام بالسياسات المعتمدة من قبل مجالس أخلاقيات البحث العلمي.