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Ethical Issues in Responding to the COVID-19 Pandemic; A Narrative Review

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Abstract

At present, the biggest challenge to health and economic systems around the world is the emergence of COVID-19 pandemic. Several ethical questions have been raised at the macro-, meso- and micro-levels with respect to proper management and control of this pandemic. The most important factor in creating fear and public anxiety and disturbances of social functions is the fatalities caused by the epidemic by an unknown pathogen in most countries. Decisions for epidemic control measures are made among many uncertainties, and prioritize public health over individual rights. People's trust and compliance with recommendations play a decisive role in public actions. Therefore, during an epidemic, necessities such as adherence to the values of honesty, respect, human dignity, solidarity, justice, reciprocity, transparency, and responsiveness in the response system need to be considered. The major ethical considerations in macro and micro levels of decision-making responding to the COVID-19 will be reviewed in this paper. Ethical dilemmas arise in different domains of a pandemic such as restriction on freedom of movement, individual's refusal of preventive or therapeutic interventions, health care workers' rights and duty to care, the allocation of scarce resources, off-label use of diagnostic and therapeutic measures and research. The purpose of this article is to pay attention to ethical principles in solving these challenges and does not necessarily respond to all ethical problems; however, it draws the reader's attention and moral sensitivity to the issues raised in this area.

Key words: COVID-19; Ethics; Pandemics; Public Health

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CONTEXT

On the last day of 2019, China announced unexplained pneumonia clusters to the World Health Organization (WHO). The disease, called COVID-19, quickly spread beyond the borders of China so that, in less than two and a half months, turning it into a pandemic was declared by the World Health Organization on March 11, 2020 [1]. In addition to the challenges to the public health system, epidemics pose some ethical problems as well [2]. Some of these challenges are in conjunction with the macro-management of public health response, and some ethical issues occur in the context of patient care for health care providers. In general, the most important ethical value in public health, a subset of which is pandemic, is solidarity. Given that the benefits of public health are prioritized over the individual's interests during the incidence of an infectious epidemic, this will reduce people's autonomy [3]. In the evaluation of risk and benefits, the patient's one is not merely raised, and it should be assessed in balance with the health interests of the whole society. On the other hand, these conditions raise the issue of justice in access to resources [4]. One factor that can exacerbate health inequality is the vulnerability of the disadvantaged and vulnerable groups in society to the epidemic. The epidemic response is generally conducted in uncertainty and social disruption [5]. The inefficient epidemic response wastes resources and undermines the power of the health system and exacerbates public anger and disorder. Trust and cooperation of the people are essential for the efficacy of the programs in the epidemic response. Paying attention to ethical considerations in the outbreak and taking an ethical approach, are beneficial in maintaining public trust and confidence.

In this article, a brief overview of the ethical considerations, most of the affected countries with COVID-19 pandemic are dealing with, is presented. Although, ethical considerations are often the same in infectious epidemics, the severity of ethical challenges can be different in each epidemic and each society.

International Responsibilities of Countries

The experience of recent pandemic demonstrated that governments must not only commit themselves to the health status of individuals within their borders but also they are responsible to prevent the spread of the epidemic to other countries [6, 7]. The pandemic mainly damages the economy and the health of the countries with limited resources. Sanctions and wars are international determinants of poor health which hinder the situations to control the transformation of the epidemic into a pandemic [8, 9]. International solidarity to prevent the spread of the disease to other countries, as well as to aid to countries with poor infrastructure to allow rapid response to the epidemic is critical [10].

Through prompt notification of events and providing reliable statistics to the international community, countries are ethically bound to help prevent the spread of the disease [11]. On the other hand, other countries in the world, which their resources and people's lives are saving in this way, have a reciprocity duty to humanitarian aid to affected countries for the supply of personal protective equipment, medication and research & development on diagnostics, therapeutics, and vaccine. Thus, the capacities of other countries should be employed to restrain the spread of the epidemic in the country of origin and to help limit the damage caused by it in the country of origin [12]. We have lost the time and now the pandemic affected many countries. However, the well-off countries still have a duty to allocate funds for research on managing the pandemic. Attempts for the development of vaccines or drugs should include the limitations of patenting so that it can guarantee the fair access of all people around the world to this scientific achievement of the health.

Vulnerable people

Although saving the lives of more people is considered as the paramount ethical principle in the epidemic response, fair distribution of benefits and damages resulting from the pandemic response should not be overlooked. As all countries do not suffer damages from the pandemic at the same level, different groups of a community experience dissimilar influences from the epidemic. People whose economic income entangles in difficulty due to restrictions on movement such as isolation, travel restrictions, or quarantine, people who are at increased risk of infection due to living in nursing homes or being in jails, people who are deprived of access to health information because of impairment in the ability to establish communication (such as illiteracy, hearing loss, lack of familiarity with the local language), marginalized groups who may be more exposed to discrimination as a result of the incidence of an epidemic, and groups that have no access to good health status through the social determinants of health are all examples of situations of vulnerability in the epidemic. Equity necessitates that more attention be paid to these groups' needs and that greater resources be assigned for the delivery of services to them [13-15].

Allocation of Scarce Resources

In the spread of the Coronavirus epidemic to all areas of a country, in practice, there might not be possible to provide needed resources by mobilizing them. The shortage of hospital beds, manpower, medicine and equipment are among the limitations of resources in the epidemic. Following the increase in the number of afflicted persons, in the COVID-19 crisis, serious discussions on determining the criteria for ventilator allocation were raised in different countries [16-19]. In making decisions to allocate the resources, a balance between utility and equity needs to be achieved [20]. Enhancement of the utility in the ventilator allocation requires that resources be dedicated to people who have more chance of surviving. Equity demands that services be delivered to those who need more than anyone, and vulnerable people should not be systematically eliminated from receiving resources. Moreover, it is essential to determine will only the number of lives preserved be the criterion for estimating utility, or will the long-term survival of patients (years of life preserved) be the criterion? For example, if a person who has a shorter life due to cancer or congenital disorder to be placed in a lesser priority to receive a ventilator compared to a healthy person who needs the ventilator to the same extent and enjoys the same chance of survival, although more years of life have been preserved, this will be systematically to the detriment of those who suffer from a disease in the natural lottery that shortens their lifetime relative to their peers.

On the other hand, taking into account the factor of age on the basis of the principles of life cycle seems to be ethical. This means that a person with 30 years old has not yet had the possibility of enjoyment of long life compared to a person with 70 years old, and it's fair to say that, between the prior and the latter ones, the young person has a higher priority to receive a ventilator. Another important issue in the discussion of ventilator allocation is that withholding and withdrawing the device have no ethical difference from one another. In some religions, including the view of Iranian

Shiite scholars, there is a difference between the two, and disconnecting the device is considered to be manslaughter [21]. Although depriving the patient of receiving the device is accepted in terms of the jurisprudence, in some instance it eliminates the possibility of a closer examination of the response to the ventilator and the chance of more survival of the patient, which even in the school of Islamic ethics, it is in contradictory with the principle of preserving human life [22]. To fix the problem, some experts in the fields of intensive care unit (ICU), ethics, jurisprudence, and law must discuss various considerations of the intended resource allocation together and come to conclusions.

Restrictions on the Movement of Citizens

Commonly, to minimize the transmission of infection, restriction on the freedom of movement of people, such as travel restrictions, restrictions on gatherings, isolation of sick people, and quarantine of people with close contact is crucial which each of them is somehow considered as a restriction for the autonomy of individuals. Overall, to exert the restrictions on the freedom of movement, the lowest level of infringement on personal autonomy, which is effective and proportional to prevent the spread of infection, must be applied. The voluntary restriction of movement is preferred over the forced one [23, 24].

Hence, providing honest, continuous and respectful communication to gain social acceptance and compliance is necessary. As a result of restrictions on freedom of movement, many people may lose their earnings, or even their careers, or experience illness stigma [25]. In applying the restrictions on movement, reciprocity requires that the basic needs of restricted people to be met, and human dignity requires that they get due respect and their human need to engagement in purposeful activities and communication with their loved ones be respected. Furthermore, to prevent the stigmatization and harassment of people under quarantine and isolation, public educations need to be provided in order to correct people's misconceptions [20]. Moreover, affected people should have opportunities to make their voices heard and challenge the decisions they believe to be unfair.

The Rights of COVID-19 Patients

Concern about death and distancing from others leads to serious anxiety and stress for patients. During their hospitalization, the COVID-19 patients see health care providers only from behind masks, face shields and gowns, so recognizing them and building human relationships with them are difficult for patients. This necessitates the need for establishing empathetic communication and paying attention to the mental and emotional concerns of patients by health care providers. Moreover, in the hospital setting, patients are isolated in no visitor status. The loneliness of patients, while intensifying their emotional concerns, raises the physical needs concerns that were previously might be met by their companions [26]. Some patients have mobility impairments, and some others suffer from communication disabilities. The limitation of the number of health care providers does not make it possible to respond to all the needs of patients. The recruitment of the minimum number of trained volunteers among the infection survivors to meet the needs of patients may be an appropriate strategy to address this challenge.

One of the other challenges for the patients is the privacy of their identity. Different surveillance systems include their identity information. Preventing the access of researchers and people outside the treatment team to identifiable data is essential [27-29]. During the treatment of patients, many biological samples are collected for their care. Maintaining additional samples and the use of them for research necessitate considering the confidentiality in sharing samples and obtaining the patient's informed consent where samples are identifiable or research results can cause a risk to the patient or his/her community [30, 31].

One of the other ethical challenges in pandemic response measures is dealing with individual's refusal of diagnostic, therapeutic, or preventive measures [32]. Providing understandable and enough information for patient's voluntary informed decision-making is the default in all health interventions. Always, optional and voluntary measures take precedence over forced measures in all public health interventions. However, sometimes the patient refuses to stay at the hospital or get treatment. In these cases, similar to any discharge against medical advice, efforts should be made to identify and address the concerns of the patient. In the epidemic response measures, overriding an individual's refusal of interventions is ethically acceptable only if 1) the refusal pose public health risk, and 2) the intervention is effective to prevent harm to others, and 3) there is not any solution to protect the health of others, other than the intended intervention (20). Until there is a cooperation of the patient for isolation at home and there are people to take care of him/her, forced isolation at a shelter is not required.

The Responsibilities and Rights of Frontline workers in the Epidemic Response

All those who are continuously exposed to patients or contaminated substances due to their work, whether as the main labor force or as a volunteer, are frontline workers. Reciprocity to frontline staff requires that necessary personal protective equipment should be provided to them, and they should take priority for treatment if they get sick. Higher safety and treatment priority of these people is also of special importance in terms of maintaining the needed human resources for the delivery of services to greater patients (increased utility) [33]. The epidemic response is associated with ethical distresses and psychological challenges, and staff on the frontline must be prepared and supported to deal with these challenges and uncertainties [20, 34].

A serious ethical question about the level of acceptable risk in service delivery, where resources are extremely limited, and there is insufficient protective equipment, arises. In the incidence of the pandemic, unfortunately, all countries confront challenges in the supply of personal protective device ideals. Patients and the public at risk of an epidemic expect health care workers who are the professional in control of the infection, to employ their knowledge and skills to help people, even in limited resources [35]. Nevertheless, this does not mean the acceptance of any level of risk. Cases where staff is endangered by serious life-threatening risks should not be persuaded to provide services [36]. Measures that can help provide services in critical circumstances are the resource management for mobilizing protective equipment to high-risk environments and the use of COVID-19 survivors in these environments [37, 38].

Research during Pandemic

During a pandemic, we need to carry out different types of research to find out the reliable answers to questions about managing the epidemic. The necessity of prompt access to the reliable results of these investigations makes necessary the speed in the process of ethical and scientific review of these studies. Based on a report, 153 articles were published about this pandemic from the beginning of January to February 19, whereas half of this in a year was released in the case of the SARS epidemic. On the basis of this report, 60% of all articles on the COVID are in the pre-printed forms [39]. Early publication without peer review can provide erroneous information and entails false conclusions in public health response and patient care.

How much health budget is allocated to research, is another ethical consideration. Research, particularly in developing countries, should not lead to a shift of resources from the epidemic response and treatment to research. As well as, it is essential that research be done in conjunction with epidemic response measures as much as possible and do not have any interference with them [40, 41].

Conducting research during a pandemic requires prompt ethical approval. However, prompt approval should not detract from the ethical standards of research. All standards of ethics in research must be respected in investigations carried out on the COVID-19 epidemic [41-43]. In the pandemic of the recent infectious disease, for which a definitive cure (absolute treatment) has not yet been found, any kind of experimental medications may be perceived to be therapeutic intervention by patients. Patients need to be given sufficient information about the research and freedom to make an informed decision for participation in the study [41, 43-45].

Publishing articles based on the analysis of pandemic surveillance data raise the discussion of data ownership and copyright [46, 47]. Many physicians and health care institutes are involved in patient care and gathering pandemic surveillance data, but there are few who have access to the whole data. In order to protect their ownership, researcher and/or medical centers may avoid sharing their data. The prompt data sharing is extremely important for improving the statistical power of studies; it also provides the possibility of verifying and ensuring the accuracy of analyzes and results. Thus, an agreement on data sharing, data access, data ownership, and copyright dispute resolution must be drawn up [48].

Compassionate Use of Interventions

Although the results of studies in the case of the COVID-19 disease have not yet confirmed the absolute therapeutic efficacy of a product, to lower the disease duration and its mortality rate, prescribing compassionate and off-label use of drugs such as chloroquine, hydroxychloroquine, azithromycin, lopinavir-ritonavir, favipiravir, remdesivir, ribavirin, interferon, convalescent plasma, steroids, and anti-IL-6 inhibitors has been proposed based on the similarity of the pathogen, in-vitro studies and non-definitive human studies [49]. However, it is crucial to know that control of the side effects of medications and evaluation of their effectiveness cannot be accurately followed up and evaluated out of a scientifically designed research.

The extensive administration of unapproved drugs

can result in large amounts of complications and costs without a noticeable effect on patients' outcomes. Compassionate Use of drugs in an outbreak is only ethical in the situation if 1) the disease is serious, i.e. the mortality or morbidity rate is remarkable, 2) there is no effective treatment for the disease, 3) immediate initiation of the clinical trial is not possible, 4) in a scientific committee, evaluation of its efficacy is examined in details concerning the available evidence, 5) the resources for minimizing the risk is available, 6) informed consent is taken from the patients, and 6) its efficacy should be continuously monitored, and its results should be shared with the scientific community [20]. It appears that this challenge has extensively occurred in off-label prescriptions in the recent pandemic. For example, the lack of conclusive scientific study has resulted in the early conclusion of guidance for the prescription of chloroquine in COVID-19. The efficacy of this drug on clinical outcomes of COVID-19 patients is still questionable, and its widespread prescription can lead to restricting the access of rheumatoid patients, such as lupus patients, to this medication, and results in some considerable complications [50, 51].

The challenge of the lack of sufficient evidence for examining the benefits and risks of interventions is not exclusive to therapeutic interventions. It seems that in the process of diagnosis, we don't know which tests in what sequences provide an accurate diagnosis of COVID-19 [52]. Despite its high sensitivity, the application of CT-scan as screening is not recommended, and the American College of Radiology recommends chest CT scan merely in symptomatic hospitalized patients in the case of presence of an indication and, forbids physicians to prescribe CT scan to determine who should be tested or admitted [53]. Unfortunately, today, given that it has only 25% specificity, but we see the widespread use of this imaging even in cases where it has no effect on disease management, and in accordance with the FDA estimates, it can cause mortal cancer in a person out of any 2,000 people [54, 55].

Conclusions

In this article, the current ethical challenges of the COVID-19 pandemic were reviewed for health care providers and managers of the public health response to the pandemic. As seen in all types of challenges raised, the values of solidarity, utility, fairness, honesty, reciprocity, and the minimum level of restricting individual autonomy are crucial pillars in planning and implementing the pandemic response measures [56]. To ensure respect for these ethical values, soundness, transparency, and responsiveness must be held in the process of adopting and implementing the pandemic response policies [57].

The experience on the COVID-19 demonstrates that the scarcity of resources incurred an enormous shock on the health system of some countries. The pandemic will, unfortunately, deepen the gap of the health inequalities and cause the highest rate of mortality from poor countries with weak infrastructure [58]. Under these conditions, the leadership responsibility of the WHO for using the capacity of all countries to decline human casualties of the event is of great importance. Solidarity, honesty, and collegiality at the local and global levels are the most fundamental values we require to control the epidemic.

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