Ethical Review for the Legal Healthcare Strategies Implemented During Pandemics

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Abstract: During pandemics there is cooperative efforts from the community forces to safe people and nation. The legal authorities regulate some obligations that may be considered by some medical practitioner and people as unethical in normal times. The aim of this study is to review these exceptional legal regulations with discussion from the ethical point of view according to the international code of ethical medical practice. Scientific literatures were reviewed to reach a consensus regarding the discussed issues that include the patients’ isolation and quarantine regulations with its implication on patient rights of autonomy and privacy, the regulations for notification and patient tracing with its implication of patient privacy and confidentiality are discussed. This study explores the ethical practices with the aim to reach consensus for an ethical healthcare strategy that can compile with the needed legal regulations in such exceptional circumstances of worldwide endangering pandemic. It was concluded that legal regulations during combat of pandemic should be designed to keep the patient rights with the community safety in same occasion by cooperation between the healthcare workers and the low enforcement authorities.

Keywords: Legal medicine, covid-19, pandemic, healthcare strategies

1. INTRODUCTION:

Mode of transmission of communicable diseases indicates a standard set of strategies to combat its spread. Quarantine is definitely a way to control the spread especially when such communicable disease poses a threat towards population and public health. However, these strategies may be an autonomy limiting procedures. Here will arise a question as would it still be ethical to enforce quarantine if it means compromising an individual’s rights to freedom? On the other hand, in event of the public refusing to cooperate, they may be reminded that exposing other people to an infectious disease is a crime that could lead to legal consequences thus those who are known to be infected are responsible to abide by the control strategies given by health officials. During pandemic, contact tracing has led to a tremendous increase in the spread of the infectious disease although this may seem unethical to go against one’s right. In Malaysia, it is by law to notify about any suspected cases, clinically established cases and deaths resulting from an infectious pandemic outbreak to the Ministry of Health without delay according to The Prevention and Control of Infectious Disease ACT 1988 (ACT 342). The health care personnel are required to notify the Ministry of Health within 24 hours upon coming across these cases. Failure to notify the Ministry of health will be charged under this section for committing the offence.
In such situations arise a debate regarding the ethical judgement for these legal practices that are necessary during the exceptional situations of pandemic. So, in this study, scientific literatures are reviewed to reach a consensus regarding the legal practices during pandemic such as the patients isolation and quarantine regulations with its implication on the ethical guidelines for patient rights of autonomy and privacy, the regulations for notification and patient tracing with its implication of patient privacy and confidentiality are discussed in this study to explore the worldwide practice with the aim to reach consensus for an ethical healthcare strategy that can compile with the needed legal regulations in such exceptional circumstances of worldwide endangering pandemic.

**SEARCH STRATEGY**
A narrative review has been done through collection of data from the scientific research engines included Google scholar, Biomed central, Research gate and PubMed. The collection of data targeted research papers published in scientific journals and WHO generalizations during and after pandemics. The used keywords included “healthcare strategies during a pandemic”, “medical ethics of pandemic”, “legal regulations during pandemics”, “legal aspects of contact tracing”, “legality of quarantine during pandemics”, “social distancing legal acts”. Then the references were summarized in an evidence table to extract the practice and literature conclusions then the researches related to each of the discussed issues were reviewed to reach a consensus supporting evidence and lastly the authors presented the different points of view and criticize each to reach a conclusion regarding each of the studied issue. The studied healthcare strategies included patient/contact tracing policy, notification about patient’s medical condition, legal aspects of quarantine / isolation/restricted movement order during pandemic, social distancing with penalties to those that refuse to cooperate, forceful investigation of suspected / contact cases during pandemic, international (cross countries) spread preventive measures, and payment for quarantine financial expenses.

**2. PATIENT / CONTACT TRACING POLICY**

Human rights ensure personal freedom and not to be deprived from own freedom meanwhile, early contact tracing and quarantine is crucial to reduce future spread. By limiting and isolating both primary as well as secondary cases, the disease spread is halted. Law of Malaysia confirm that public health authorities have full rights to do contact tracing for infected patients during a pandemic. If patients do not cooperate to for contact history, the authorities have the right to use force to ensure they obey the law according to The Prevention and Control of Infectious Disease ACT 1988 (ACT 342). A similar law is implemented in Japan. A research done in Africa by during the Ebola outbreak shows that poor contact tracing has led to a tremendous increase in the spread of the infectious disease among the locals as the chain could not be broken. Also, contact tracing and isolation was not only done specifically for patients only but also health care workers who had developed symptoms of influenza like illness while treating these infected patients.

In Europe, a study showed unique use of patient data from contact tracing during a pandemic, whereby they immediately started chemoprophylaxis medications for those having close contacts with disease established patients aiming to immediately eradicate possible new cases from developing. In an event of a pandemic, close contacts of infected individuals were traced and given prophylactic antiviral medications. This has many advantages in preventing the close contacts from getting infected though the down side to this by giving prophylactic medication, drug resistant strains are also evolving and increasing in number thus the benefits and risk should be considered during prophylactic treatment for close contacts.

After review of many writing in this point regarding the patient / contact tracing policy, it can be concluded that in circumstances endangering the safety of the community, the overall
safety should overwhelm and most of opinions agree to compromise the personal freedom for the safety of the community so, legality of patient tracing overcome the ethical view of patient autonomy.

3. NOTIFICATION ABOUT PATIENT’S MEDICAL CONDITION

In normal occasions, the patient's privacy is an essential element in medical practice and all patient’s information should be kept confidential but this principle is challenged in pandemics for the safety of the community. All established cases of the pandemic outbreak are to be notified to the public health department according to the law (National Health Security Act 2007)\(^2\). There are certain protocols in overcoming the pandemic outbreak. Among these was to create a notification system to detect new cases that were being imported into the country. This was one of the main methods taken in controlling the spread of the disease during the outbreak as appropriate actions can be taken to combat the infectious disease\(^{13}\).

Notification of emerging new cases should be done without delay and with accurate information as appropriate health departments can take immediate action, decision making and plans in ways to combat the infectious disease such as implementing social distancing, contact tracing, isolation and begin treatment to affected individuals\(^{14}\). Case notification and reporting should be done within 24 hours as this will help respective departments to tackle the outbreak crisis by diagnosing, isolating, treating and taking a contact tracing history as seen during the H1N1 pandemic in 2009\(^{15}\). The public health department plays an important role as a primary notification center for new pandemic outbreaks. The department will first notify the World Health Organization (WHO) regarding the suspected global outbreak of an infectious disease. WHO will then investigate and if necessary will raise the alarm to the world to take drastic measures in containing and reducing the spread of the disease\(^{16}\). It is important to notify the ‘WHO’ when a country is dealing with an outbreak as the organization will be able to alert other countries regarding the outbreak and prepare appropriate measures to combat the disease and prevent further spread\(^{17}\). Notification of pandemic cases to public health department was not only limited specifically for patients only but also health care providers who had developed symptoms of influenza like illness while treating these infected patients\(^{18}\).

In conclusion, notification is a very crucial action that is needed to be done by the health care workers to the authorities and also at international level to WHO but this does not include by any mean to invade the patient privacy to the public and patient details should remain confidential.

4. LEGAL ASPECTS OF QUARANTINE / ISOLATION/RESTRICTED MOVEMENT ORDER DURING PANDEMIC

Is it legal and ethical to implement such measures in time of a pandemic? Is it humane to enforce quarantine, shutting down of business, closing schools and preventing international travels? Who shall bear the financial expenses during quarantine? Quarantine means separating exposed asymptomatic individuals to see if they will develop symptoms. In 2020, WHO stated that quarantine is a necessary means especially in the early phase of pandemic where vaccination is not available. It also believes that most countries have the legal authority to impose such autonomy limiting measures as a part of a health response to protect the safety of the general population\(^{19}\). In the United States, the government is obligated to aid and compensate the subjects under quarantine so that they are not under burden for abiding by the law and giving cooperation in protecting the safety of others including themselves. This obligation is a part of The Siracusa Principles that mentioned the principle of reciprocity in sense that the government is returning the favour by supporting those who supported their initiation in containing the spread of an infectious disease\(^{20}\).
The two goals achieved through quarantine would be to hamper the chain transmission and to allow the affected individuals to be identified and channel them towards appropriate treatment if they were to be symptomatic. This action is imperative in diseases with asymptomatic virus spreading. Isolation, on the other hand, is keeping those who have symptoms from circulation in general populations\(^{21}\).

These two terms often refer to ‘quarantine’ can be done voluntarily or enforced by law. According to the Centers for Disease Control and Prevention, the infectious diseases that are legally quarantinable are Cholera, Diphtheria, Infectious tuberculosis, Plague, Smallpox, Yellow fever, Viral hemorrhagic fevers, Severe acute respiratory syndromes and Influenza\(^{22}\).

There are principles to be considered before enforcing movement restriction orders which include having a measurable evidence that prove its effectiveness, to use the least restrictive measure before moving on to further strategies for better outcome, take account of the financial costs, implementing measures as humanly possible by taking care of the fundamental rights of individual without adding undue burden on anyone for complying legal order. Economy-wise, it is best to provide financial aid to maintain sustenance, equitable application that does not discriminate against any group especially those that are not health-related and lastly, to ensure communication and transparency between lawmakers and those abiding by them\(^{23}\).

Quarantine is an autonomy limiting strategy during which there should be some principles to be followed in order to legally practice quarantine and for it to be ethical. The first principle is to ensure ‘Harm principle’ to be met. The disease to be contained should be infectious and could cause harm to others if left unattended. Second is to take on the least restrictive measure proportional to goal achieving disease control. This implies that voluntary quarantine should be practiced before mandatory quarantine orders and surveillance devices. Third is to ensure reciprocity to be upheld. So, the society is obligated to assist quarantined individuals in terms of their obligations. They should not be discriminated against or suffer penalty on account of discharging their obligations to society. Lastly, transparency should be in the policy as in the public health authorities are to communicate clearly the justifications of their actions. If these four conditions are met, quarantine is justified until proven otherwise\(^{24}\).

Collectively, there are five conditions that would justify implementation of quarantine even by means of restricting individual rights in the name of protecting public health. These are effectiveness, proportionality, necessity, least infringement, and public justification\(^{25}\). The Siracusa principle is largely recognized as a valid guideline on observing limitations of human autonomy. It says that even when a decision is made based on the greater good of the people, human dignity and freedom must be upheld. It requires that state limitations must use “the least restrictive and intrusive means available, and not arbitrary, unreasonable or discriminatory. The past pandemics had raised an ethical dilemma based on how efficacious quarantine were. During the SARS outbreak, it was effective as affected individuals were only infectious when they are symptomatic while those infected with Influenza could be spreading to others even before they themselves show any symptoms. This questions the balance between autonomy restriction for an intervention with limited benefits\(^{26}\).

5. SOCIAL DISTANCING WITH PENALTIES TO THOSE THAT REFUSE TO COOPERATE

 Authorities referred to as 'police power’ are used to protect public health and safety. This allows them to re-enact laws and promote regulations of health, safety, moral and general
welfare of the people under their governance. They could be limiting the autonomy of the people in the name of protecting their health and safety\textsuperscript{27}. In the presence of an avoidable health threat that could take lives, the public health power has the right to force or compel those who refuse to comply with legal orders. It is justifiable when the threat to health can be proven\textsuperscript{16}. In Singapore, three calls were made to the homes of individuals on quarantine on a daily basis and surveillance cameras equipped with temperature monitoring technology as well as electronic bands were used to monitor compliance towards quarantine. Those who were caught breaching the law would be fined up to $500. At the same time in Hong Kong, individuals in quarantine were put together in a large neighboring complex surrounded with barricades and tapes. These measures are not parallel to the guidelines of The Siracusa principle but they were accustomed to what specific society deems reasonable and necessary\textsuperscript{26}. Health officials should be working together with trade and industries to maintain cooperation. In cases where business closure is required, safety nets should be prepared for employees who voluntarily abide by the law against employer’s wishes or for employers themselves in terms where business is being shut down due to law compliance. The government should encourage business owners and workers to cooperate although in the cases where compliance is not met, they could be faced with enforced closure. One of the premises that should be closed is schools since studies have shown that it was a substantial factor in infectious disease transmission in previous pandemics\textsuperscript{16}.

6. FORCEFULL INVESTIGATION OF SUSPECTED / CONTACT CASES DURING PANDEMIC

The development of vaccines is estimated to take months, and so crisis management mainly depends on adherence of people to the recommended measures\textsuperscript{28}. Screening tests for diseases is lawfully enforceable but there are ways to improve its success by prioritizing human rights principle. This includes counselling requirements, ensuring the privacy of subjects and by protecting the subjects found to be positive of such disease\textsuperscript{21}. Physicians should use their professional independence to identify the best care for the patients and should practice the normal ethical requirement of informed consent and confidentiality as much as they can. Any breached requirements should be justified and informed to the patient. Should there be any unjustified treatment by the physician, they should be held accountable concerned authority\textsuperscript{29}. Before ‘ordering’ a subject to be checked physically and tested for specific disease, that subject must pose an actual threat to the community as in patient is contagious or suspected to be. It is important for each country to come up with guidelines to follow in such a situation\textsuperscript{16}. Law regulations in England allow medical professionals, public health professionals and police to enforce quarantine on individuals at risk or suspected of having the current pandemic-causing virus, Covid-19. Health boards may also apply for court orders for quarantine and medical examination including restricting that individual’s activity or prohibiting them from going to certain places\textsuperscript{14}. A government’s main duty is to protect the public’s health and safety. In the US, each state has a ‘police power’ where they have inherent authority to improve restrictions on private rights for the sake of the people under their care. These legal authorities allow them to take actions in times of outbreak including implementing and enforcing control measures even to the extent of closing or destroying private properties\textsuperscript{30}. How quarantine and social distancing measures are conducted is a significant concern that should be paid attention to as it will affect how the public response to it and how effective it actually is. In China, a rumor has caused panic during the SARS outbreak that drove hundreds of thousands of people to flee the city overnight which defeated the purpose of social distancing. On the other hand, quarantine measures have been taken cooperatively by
people in Toronto. Observation has shown that the decision makers had practiced transparency in approaching quarantine orders\textsuperscript{31}.

7. INTERNATIONAL (CROSS COUNTRIES) SPREAD PREVENTIVE MEASURES

Transnational infectious disease control is imperative as global infection spread is contributing to the worsening of pandemic and can be done with measures such as entry or exit screening, reporting, health notifications, travel advisories or restrictions and physical examination as well as management of both sick and exposed individuals\textsuperscript{16}. The ability of infectious disease to spread is fasten due to the spreading capacity of international travel. This hampers the ability to respond to such disease as it is being spread simultaneously globally. This raises the initiation of agreements that are not legally binding. As a result, multiple initiatives were made leading to a public health response to the international spread of disease without unnecessarily interfering with international traffic and trade. One of them is the International Health Regulations that helps in assessing and notifying events that may constitute a “public emergency of international concern". Many nations have performed lockdown to minimize the spread impact of coronavirus\textsuperscript{31}. As a method to curb, apprehension, detention, examination or conditional release of individuals is authorized by the US federal regulations if they are coming in from another country. Airline pilots and ship captains are to instantly report the presence of ill passengers on board to join the force in containing the spread of infectious disease\textsuperscript{32}.

8. PAYMENT FOR QUARANTINE FINANCIAL EXPENSES

In the US, taxes were imposed to provide for the state’s general welfare and regulate interstate businesses. They also oversee health related activities including inspection of meat, poultry, and other foods; the regulation of drugs, biological products, and medical devices as an initiative to protect the public’s health and safety\textsuperscript{30}. The Public Health Service (PHS) acts authorize the PHS (Public Health Service) to care for and treat persons under quarantine. The care and treatment may be financially covered by the PHS be it from public or private facilities as authorized by the officer in-charge during administration\textsuperscript{32}. Physicians have moved forward from a libertarian role into a more social conception role. The World Medical Association stated that everyone who is in need of medical care should be given so even if they don’t have the means to pay for it. Both society and medical practitioners are obligated to help for them in a sense that the former should provide subsidies while the later should participate in it to a reasonable extent\textsuperscript{29}. During the Influenza Pandemic, most Singaporeans understood that it was their civil duty to be obliged to the restriction orders as a measure taken to combat the spread of infectious disease although it limits their autonomy. They also expected a reciprocating obligation by the government to provide food, shelter, social support services and other basic needs of restricted individuals. In other sense, they are expecting the party that came out with restriction orders to provide for their expenses during the period of restriction\textsuperscript{33}. However, most of control plans utilize different maneuvers of contact control and self-isolation or quarantining; upgrading the implementation of public health hygiene, including hand wash, respiration habits, and social distancing; readiness of health systems to face a sudden rise of advanced illness cases who need isolation, oxygen, and a ventilating machine, with a deferral or even cancelling significant mass occasions\textsuperscript{34}.
9. CONCLUSION:
Quarantine and isolation are necessary measures that should be taken in order to combat infectious disease especially in the face of early pandemic where vaccination for the particular disease is still on its way. It should be justifiable, least restrictive, would not compromise financial costs, be implemented as humanely as possible and to ensure transparency between lawmakers and the general public. Previous pandemics have shown that when the enforcements made did not compromise the autonomy of the subjects affected by it and exercised without discrimination, cooperation was given and effectiveness is measurable.

As an ultimatum, the refusal of duty is acceptable only if the physician has a reasonable reason to do, for example: if a physician needs to refer patient a more capable professional in treating them during midst of pandemic however if the reason to not treat comes down to one’s own will not to treat then the physician may be at risk of penalty according to each country’s code. This dilemma requires the whole health-care along with the government to determine the ways in managing physicians who flee during the time of need and coming up with rewards for providing services during the time where infectious disease may take away one’s life.

10. REFERENCES


