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Ethics for Surgical Professionals in COVID Times

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ABSTRACT

Since the outbreak of COVID in 2019, it hasn't been easy on anyone. Healthcare professionals and other front line workers are working odd hours to keep the general public safe. The increased patient load and mortalities with limited resources have forced hospitals to put a triage system in place. This has caused a delay in all elective surgeries and only emergency cases to be on the table. This isn't easy for surgeons either, as they would have to operate and work for unbounded hours while wearing a PPE kit. The moral compass of each and every individual has a different tipping point, and the current pandemic has definitely put it to the test, but amidst this chaos, patient care has been a priority, at least theoretically. It is also important to consider the mental health status of doctors during the spread of COVID and how virtually very little has been done to make it better. It is also important to note the role of the individual patients and their relatives along with the "help" provided by the governments has also not been of much use, especially when attacks on doctors have been increasing daily, but it is also important to understand the commitments with which most of the healthcare professionals have been working tirelessly.

Key words: Current pandemic, Limited resources, Surgeons, Mortalities

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INTRODUCTION

For the past two years, the COVID pandemic has consumed the lives of healthcare workers and citizens alike. Affecting people in numbers previously unfathomable, COVID has let its mark as one of the most devastating public health catastrophes. In just the so-called '2nd wave' of COVID in India, almost 3 lakh lives were lost, perhaps more, due to probable undercounting of deaths.

COVID is caused by the SARS-CoV-2 (Severe Acute Respiratory Syndrome Virus-2), which originated in Wuhan, China. It comes from the Coronaviridae family, which consists of other respiratory viruses, such as the SARS-CoV-1 (Severe Acute Respiratory Syndrome Virus-1) and MERS (Middle Eastern Respiratory Syndrome) [1].

The transmission of COVID has been studied in great detail, to understand how best to prevent its spread and bring down the incidence. The primary mode of spread is *via* airborne respiratory droplets. These virus laden droplets are released from the mouth when one coughs, sneezes, or even talks [2]. When the droplets are larger than five microns, they tend to fall on the ground or other surfaces, contributing to the formation of fomites. Fomite transmission can be easily prevented by practicing proper hand hygiene like repeated sanitization or washing hands with soap and regularly sanitizing surfaces of inanimate objects. Droplets that are smaller than five microns remain suspended in the atmosphere for extended periods; this causes it to direct inhalation by the human, accounting for the involvement of large numbers of people [3]. These aerosols gain special importance for medical professionals, essentially surgeons and anaesthetists, due to their generation in procedures such as endotracheal intubation, nebulization, and CPR (Cardiopulmonary resuscitation), repeatedly on a daily basis. Coronavirus disease has a multitude of presentations, ranging from simple fever, cough, and cold, to dyspnoea and even respiratory failure. Most symptoms are non-specific and may be written off as a regular viral infection unless a high degree of suspicion is present. The most concerning point to note is its asymptomatic presentation. This indulges ignorance towards screening and testing.

In times of a pandemic, a healthcare worker is faced with many ethical dilemmas. At a time when each hospital is burdened with a huge influx of COVID positive patients, it becomes inevitable that a system of triage must be formulated, to ensure the best care is provided to each patient. Patients must be prioritized in terms of severity of their illness, life expectancy during and post-hospitalization. Surgeons in this time, face some unique challenges. The scarcity of resources rationalizes the need

to postpone non-emergent surgical cases to be treated at more suitable times. Apart from surgical intervention, it becomes important to involve help from all the personnel from all the branches of medicine in these challenging times when apart from just medical equipment, mortality rise amongst healthcare workers has dragged the healthcare system down to the abyss.

LITERATURE REVIEW

This review article aims to explore the many challenges faced by surgeons during a pandemic.

The fundamentals of providing ethical and conflict-free healthcare include beneficence, justice, autonomy, and non-maleficence [4].

In line with the Hippocratic Oath, this means a patient must be treated to benefit their present condition, in a manner that is equitable and impartial, done with the intention of not causing any harm, and by the independent choice and free will of the patient [5]. During pandemic free times, the application of these principles is practical and feasible, as each case can be assessed as an individual entity. However, in unprecedented times of public health crisis, this directive must be looked at from a larger perspective.

In this article, we will look at the ethical and moral predicament of surgeons during a global pandemic, under the four principles of ethical healthcare.

Beneficence

Some of the common acute emergencies that general surgeons encounter in their practice include bowel obstructions, acute abdomen, perforated viscera, and traumatic injuries to internal organs. COVID has had an impact on how people view their health, most being rightly cautious about showing up at hospitals. This is reflected by the 59.1% decrease in surgical emergencies in Europe [6]. However, this judicious nature may be a double edged sword, leading to under investigating, or late diagnosis of life-threatening situations. Most of these cases end up being managed operatively and are otherwise deadly, having high morbidity and mortality. When hospitals are burdened with large numbers of COVID patients, it is important to prioritize patients which require urgent medical care from those who do not.

The American College of Surgeons (ACS) made triage recommendations, to prioritize the surgical needs of certain patients while finding it beneficial to either carry out conservative management or postpone elective surgeries for later. They divided the pandemic into three phases, based on the COVID case burden on the hospital, and then endorsed a course of action for patients according to their medical needs (Table 1).

Table 1: ACS guidelines for triage of surgical patients.

Phase		Course of Action
Phase I	Few COVID cases, adequate resources available	Operate if surgery is required within three months or else survival will be compromised
Phase II	A large number of cases, limited resources available	Operate if surgery is needed within a few days or else survival will be compromised
Phase III	Cases exceeding hospital capacity, lack of ICUs and ventilators	Operative if surgery needed within a few hours or else survival will be compromised

The national health services of England classified tumour resections, cholecystectomy, appendectomy, and complicated hernia repairs as surgeries that could be done three months post-diagnosis, while uncomplicated hernias, stoma creation, or reversals, etc., were considered to be non-urgent [7].

Not every surgical patient can be managed in the time of a pandemic where most are fighting for their lives due to lack of ventilators and hospital beds. India even saw a shortage of medical oxygen, leading to many easily preventable deaths [8]. Resource allocation is, therefore, of utmost importance. The distributions of PPE (Personal Protective Equipment), oxygen, and basic life support medications, which are used in both operating rooms and ICUs, should be towards those who are acutely sick, and those who will benefit from their acquisition.

However, the issue with triaging patients based on 'emergent' and 'non-emergent is the short-term nature of this classification. Many cases may be managed conservatively at first presentation, but postponement may cause an overall increase in morbidity and mortality, by giving rise to complications, a general worsening of the condition, or simply the risk of superadded infections which are commonly widespread and hard to control in such immune compromised patients [9]. Weighing the short-term advantages and long-term detriment is a tough task, and any decision made by the surgeon is an unpredictable gamble.

Justice

Justice is carried out only when individuals are treated fairly, equitably and with proper intention. In terms of law, justice is of various types, but the most relevant to the clinician is the distributive justice category [10]. As the name suggests, distributive justice can be executed when healthcare resources are assigned to all individuals in a manner that is impartial and equal, by the standards that are set by the court of law and society. How to achieve this? There are various distributive justice principles that are legitimate. These are divided amongst each individual:

- Of an equal portion

- Based on need
- Based on effort
- Based on contribution
- Based on merit and
- Based on free-market exchanges.

Each concept is not mutually exclusive; they may and are frequently mixed in the application. It is clear to understand how difficult it is to choose, balance, and refine these principles in order to develop a logical and viable system for distributing medical resources [10].

In COVID, the main issue of lack of resources during COVID has made this principle more of a dilemma. For this principle to act, it is important to remove the biases, provide equal opportunity to access healthcare, and most crucial of it all, to appeal for justice in cases of discrepancies. Surgical negligence is not that uncommon. Most of the health care centres were overburdened, and any mishaps would not garner much attention. Apart from that, most of the amenities were available only to those who could pay a hefty price, pushing millions of people into poverty [11].

Autonomy

The epistemological cornerstone for autonomy, as construed by thinkers Immanuel Kant (1724-1804) and John Stuart Mill (1806-1873) and acknowledged as an ethical principle, is that all people have ingrained and unrestricted sense of worthiness and therefore, must be capable of making balanced and reasonable choices and decide morally, and each person must be allowed to practice their capacity for sovereignty for oneself [10]. It was reinforced in 1914 by Justice Cardozo, who stated, "Every human being of mature years and sound mind has a right to select what will be done with his own body."

Each individual is autonomous, and similar to the other principles of ethics, it should be equalised against conflicting ethical viewpoints and ideals, and, in certain situations, overruled; an apparent example would be if a person's autonomy and its consequences causes harm to another persons. Exceptions of this autonomy exist in the form of those who are incapable or incompetent to act independently, such as those who are deemed 'immature', like minors under the age of eighteen or those who are not in a sound state of mind, whether it is due to psychiatric or physical illness.

It is not quite astonishing to learn that patient autonomy in the form of written, informed consent or adequate explanations regarding medical procedures is mostly absent from modern clinical practice. Cultural beliefs and patriarchal structure of families contribute to this practice of having a group of people make medical decisions for one person in the name of 'concern'. The ultimate choice of course of action must be in the hands of the patients, especially in COVID times, where most patients were not being brought into hospitals for the fear of getting infected. Similarly, the decision to carry out potential lifesaving surgery must be a decision between the patient and doctor, after full disclosure of the possible risks and benefits.

In recent times, there has been a shift in this paradigm, with more and more evolution in technology, the omnipresent internet is not only educating and raising awareness amongst common people but also helping to start more logical and patient safety-cantered conversations with their physicians. This situation has been critical in a pandemic situation like COVID. Amid the chaos of daily mortalities, a ruckus has been created by fake news, sharing irrelevant and no-scientific information amongst the crowd. This makes it arduous for doctors to convenience their patients to make a choice on evidence-based medicine rather than believing pseudo-scientific methods. This has also caused a rise in attacks on doctors and plummeting the care and trust provided by healthcare professionals [12]. The paucity of literature and the "changing" nature of the virus have made healthcare professionals reluctant to answer with credence.

Non-maleficence

It has been proven that endotracheal intubation is an aerosol generating procedure. Aerosols are implicated in the transmission of the SARS-CoV-2 virus, putting anaesthetists, surgeons, scrub nurses and operation theatre staff at developing an infection. Due to the small size of aerosols, they are theorized to reach the deepest portion of the lungs, causing a much more severe illness. Hospital staff is exposed to a number of communicable diseases on a daily basis by virtue of their job, however, it is unethical that the same risk is extended to their family members and other associates of the non-medical field who may be living in close proximity. Adequate measures to cease aerosol transmission from confirmed COVID positive patients must be undertaken by the hospital management. These include using negative pressure anterooms for intubation, and operation, providing good quality PPE (personal protective equipment), which includes face shields, gowns, and shoe covers as well, and proper sterilization of the operating rooms [13].

DISCUSSION

In order to protect the health of hospital staff, proper masking of patients and their attendants must be enforced by authorities. Telemedicine is now emerging as a good alternative to OPDs (Outpatient department), as it promises the safety of social distancing while still catering towards a personal doctor-patient relationship [14].

It should be noted that non maleficence extends beyond the hospital and into the community. In a situation of public health, the health of one individual must be extrapolated to the health of society as a whole. Nosocomial infections are notorious for leading to community outbreaks, becoming even more relevant with COVID, due to high infectivity and low natural immunity towards this virus. 41% of COVID infections in China were found to be acquired from the hospital [9].

Ideally, proper preventive measures taken by all can reduce the transmission rate quite significantly [15]. However, hesitancy towards masking and vaccination, and the psychological impact of social distancing have led most to abandon personal protective measures, endangering not only themselves but also their community. Attendants of sick patients who accompany them to the hospital are also carriers of the disease, as they are more likely to be healthy and therefore, asymptomatic, unlikely to be tested for COVID and isolated. In these times, the number of visitors to hospitals and nursing homes must be limited.

CONCLUSION

Some doctors, surgeons, and health care professionals may be inexperienced with distributing scarce resources and changing medical procedures during surgical and non-surgical emergencies and pandemics. Beneficence, fairness, autonomy, and non-maleficence are the essential ethical concepts of health care. These are still relevant in the event of a pandemic. However, its applicability evolves when health care shifts from a focus on individuals to a focus on society as a whole. Obtaining the most advantages from accessible resources, fair treatment of patients, recognizing instrumental value, and prioritizing the most vulnerable are all recognized ideals. Each of these values has advantages and disadvantages, and compromise and giving precedence to some things over others is essential. Choosing how each of these values will have an acceptable voice in how limited resources are allocated is where ethical and clinical reasoning abilities must be at their best. Clinical and surgical procedures that are routine in normal times may not be routine or safe during pandemics. Several important surgical organizations have recently produced guidelines that give some early recommendations for dealing with COVID-19. Though the surgical and therapeutic methods described differ from usual treatment, they are congruent with the ethical concepts and values employed during pandemic care. Understanding the reasoning and ethical backing for these clinical and surgical techniques benefits health care workers, patients and families, and other members of society. Patient and society trust in the medical community is strengthened when they receive accurate, honest, and open information and observe the medical community consistently apply the treatment and triage procedures that are espoused. A clinical triage team can also be extremely useful for making the most difficult judgments that may emerge during a pandemic. Patients, families, and other members of society should also be aware that clinical and surgical techniques that are conventional in normal times may not be standard or safe during a pandemic. This may be really challenging for them. This is especially tough for families whose loved ones have COVID-19 and are severely or terminally sick. Because visitors may not be permitted in the ICU during these times, talks about objectives of care can be cognitively and emotionally draining for family members. When this sickness develops serious, family members who do not have medical knowledge may not completely appreciate the boundaries of treatment. Their faith in the medical community will be strengthened if they get regular, honest, accurate, and open information and observe the medical community consistently apply the treatment and triage methods that have been espoused. During a pandemic, an informed and trusting public is a useful partner to the medical community.

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