

**Review****DELAYED CARE IS NO CARE: COVID-19 IMPACT ON CANCER PATIENTS AN ETHICAL PERSPECTIVE**

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One of the fundamental values in medical ethics is the concept of care. The care further establishes the trust between a doctor and a patient. However, due to Covid-19, non-Covid patients have not received the proper care and treatment or received delayed treatment. As a result, many patients have died, and many have suffered painful deadly consequences.

**Aim and objective:**

One of the aims of this paper is to analyze how delayed care could damage cancer patients' treatment and recovery and the other is to suggest integrated covid-cancer care management strategies. The present paper offers a medical ethics perspective based solution on analyzing the impact of Covid-19 on cancer patients.

**Materials and Methods:**

We have adopted a systematic review-analysis approach for the literature review. The cross-sectional systematic review of the contemporary cancer research papers published in major databases viz- PubMed Central, Elsevier, Emerald Insight, Science Direct, and Scopus. The terms used to search the journal articles included "cancer ethics and Covid-19".

**Conclusions:**

Delayed care is of no value from the viewpoint of medical ethics. Doctors and health care providers are like life saviors. They deal with the socially respected medical profession and perform like a social warrior. Patients suffering from any severe disease such as cancer must be given due attention and timely care as cancer cannot wait till the pandemic gets over. Cancer patients are too vulnerable to disease progression, metastasis, or other malfunctioning medical conditions that delays in treatment can be life-threatening. Healthcare systems focused on combating Covid-19, lockdown and social distancing caused the delay in critical illness treatments like cancer. Cancer patients need proper treatment in due course of time as per medical severity. Therefore, medical professionals must uphold medical ethics in treating patients with such reasonable care in time.

**Keywords:**

Cancer-care; Medical-ethics; Covid-19; Pandemic, Covid-cancer integrated management system.

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The health sector has been facing a global challenge to defeat the Covid-19. It has affected everyone's social, mental, and physical health. However, it posed deadly problems for the patients who had been already suffering from life-threatening diseases such as cancer. These people with compromised immunity don't have much hope from the possible modernist medication available. The patient and the health care providers still try to fight together, along with all the available cancer management modalities. Covid-19 pandemic has increased

the pain. It has caused the delay, due to the prevailing lockdown situation, in the diagnosis of the disease, or delays in the treatment due to Covid-19 infection to patient or caretaker or the health care professional themselves. It is the moral principle to safeguard all, i.e. the patient, staff, and caregiver. The ethical duties must be practiced, and keeping all the moral conducts high, each person should be preferred for the required care. Triage should be performed according to the severity of harm for each cancer patient who may be delayed in his/her treatment either due to the Covid-19 testing or the infection itself. There should be a level playing field. Thus, using clinical judgment would be the most ethical approach in prioritizing patients for medical and clinical appointments. Each health care provider must do the best in offering much-needed care and support.

While the actions of health care professionals were as exemplary, medical ethics was viewed from the viewpoint of heroism, but the need for the hour is to be diligent in recognizing the seriousness and criticality of the cases. And it is unreasonable since a heroic assumption presumes that clinicians would assume a disproportionate share of the responsibility to be allocated<sup>1</sup>. "When medical ethicists assess clinical practice in terms of the proportion of burdens and benefits, they invoke the doctrine of proportionality"<sup>2</sup>. A choice is proportionate when the benefits outweigh the burdens. "Alternately framed, the relationship between ends and means should be proportional, that is, adequate or appropriate"<sup>3</sup>. During this pandemic, all such formulations decide about the clinical decision of the risk versus benefit for a cancer patient who needs oncological treatment. The principle of proportionality should be cultivated and whatever is within the patients best interest should be followed<sup>4</sup>.

## 2. Impact of Covid-19 on Cancer patients

World Health Organisation declared Covid-19 a pandemic<sup>5,7</sup>, and this pandemic has resulted in the suspension of all the outpatient clinics and scheduled patient appointments also got postponed up to an indefinite period, following lockdowns upon lockdowns<sup>8</sup>. Even the scheduled surgeries were suspended initially, and later few urgent ones were restored after confirmation of the patient status for Covid-19 infection and availability of Intensive Care Unit facilities in the hospitals. All non-urgent ones still remain delayed or suspended. During this pandemic, the need to care for patients with emergency reporting continues. Cancer patients undergoing active anti-cancer therapies are at severe risk in this Covid-19 pandemic and can severely

manifest this infection. That fear and distress caused by Covid-19 pandemic can increase anxiety to these patients, which is altogether beyond limits. The fear caused by delay in diagnosis, delay in treatment, surgeries, and follow-ups are so much that actively affects the quality of life of these patients. Cancer patients are continuously at a threat of either disease progression or effectiveness of the delayed care offered to them during this Covid-19 pandemic. Many cancer patients experienced financial stress and as a result, were depressed or deprived cancer care. The anxiety is further increased by the fact that these patients can develop and have cancer get caught by Covid-19 infection, which worsens their confidence and treatment efficacy (Survey: ACSCAN, 2020)<sup>9</sup>. Cancer patients have been reported to have an elevated risk of serious infections, with the risk of mechanical ventilation or Intensive Care Unit admission or death rising by ~3.5-fold relative to patients without cancer<sup>10</sup>. Cancer history is found to confer a very huge risk for serious complications and is associated with worse Covid-19 outcomes. Wang and Zhang noted that the first danger for cancer patients in the Covid-19 pandemic was insufficient access to adequate health care and the inability to obtain appropriate medical services promptly on time, especially in such high-risk epidemics<sup>11</sup>. The scarcity of funding and hence the increased demand for services hinder the high quality of elective treatment for cancer patients<sup>12</sup>. According to a study by the American Cancer Society Cancer Action Network, 27% of active care patients registered a delay in their treatment, and 13% of patients had their treatment deferred without discovering when it will be scheduled again.

Furthermore, one-third of all cancer patients indicated that they were concerned about the effect of Covid-19 on their ability to receive care, which is particularly prevalent among patients in active treatment, as per the same survey (40 percent). Cancer patients often experience economic stress in the aftermath of the pandemic, as many around the nation. It was found that during Covid-19, almost 4 in 10 (38 percent) respondents of this survey had a notable impact on their ability to afford their treatment, mainly to minimize working hours (14 percent). In particular, decreased work hours and lost jobs during the lockdowns are troubling because they can potentially affect access to health care insurance (Survey, ACSCAN, 2020)<sup>13</sup>.

## 3. Impact of Delayed treatment

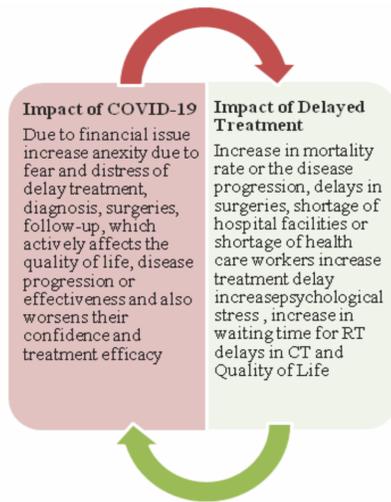
Covid-19 pandemic has disturbed almost every aspect of livelihood due to a shift to a new normal<sup>14</sup>. It is not easy for everybody to adapt to this new

normal, but we are left with no option as long as we do not have any other comorbidity to combat. But the people suffering from diseases like cancer can't wait and adapt to this normal as it's a disease which progresses at its own pace and any delay in its treatment at any stage can prove as if there wasn't any care. Cancer patients again tend to be more vulnerable to this Covid-19 infection due to their immune suppression as a result of their anti-cancer therapies. Any further delays in their treatment can increase either the mortality rate or the disease progression among them. Delays during cancer treatment have been categorized as primary (interval between the initiation of symptoms after the first hospital visit), secondary (interval between the onset of diagnosis to the start of the treatment) and tertiary (follow up post-anti-cancer therapy)<sup>15, 16</sup>. A significant proportion of time is usually consumed in primary and secondary delay in most cancer patients awaiting treatment. Covid-19 pandemic has been an important factor in the primary as well as secondary delaying of the cancer treatment due to factors related to patient viz- travel inconvenience during the lockdown or the financial issues, Covid-19 infection to the patient himself or due to healthcare-related factors like delays in surgeries, shortage of hospital facilities or shortage of health care workers. At the secondary stage also, the pandemic has a direct impact on the treatment delivery. In the event of a definitive initiation delay in care, a direct decrease in locoregional control and overall survival may occur. In their research (Hanna et al., 2020), concluded that an improvement in radiotherapy waiting time is normally correlated with a deterioration in local control rates and overall survival<sup>17</sup>. Similarly, in patients with delays in diagnosis and surgery, an adverse effect on survival has been reported (Xu et al., 2014). It was seen that a delay of one month can increase the risk of dying from 6 to 13 percent. For all patients with carcinoma (e.g. during COVID-19 lockdown and recovery), a surgical delay of 12 weeks will cause 1,400 excess deaths in the UK, 6,100 within US, 700 in Canada, and 500 in Australia, assuming surgery was the primary treatment in 83% of cases, and mortality at once was 12%<sup>18</sup>. Also increased wait times or delays between detection of carcinoma and therapy initiation may affect the prognosis. A delay may cause disease development or complications in treatment. Many variables could lead to treatment delay, and while many studies have examined how this may have impacted recurrence and survival.<sup>19-27</sup>. A British study found that treatment delays have adversely affected the prognosis when identified as having treatment symptoms for more than 12 weeks

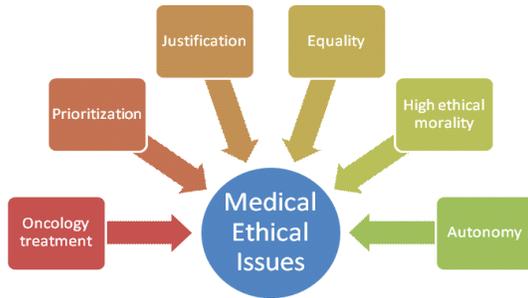
(Richards et al., 1999). Therefore, enhancing the treatment time of cancer treatments leads to adverse effects on the anticipated response and quality of life of cancer patients to treatment. Besides, there is still a fear of advancement that can affect the well-being, quality of life, and social functioning of cancer patients (Dinkel & Herschbach, 2018). Therefore, treatment delays will lead to emotional stress, hampering quality of life of these patients. Different therapy regimens are normally provided at intervals to cancer patients to allow adequate time for normal cells to undergo sub-cell repair. Surviving tumor cells are expected to increase during treatment breaks; patients with delays in ongoing adjuvant therapies are more likely to have accelerated tumor cell repopulation<sup>28-29</sup>. It also worsens cancer treatment and can cause disease recurrences and/or treatment resistance. Patients with late-stage disease need palliative care which if delayed, decreases the quality of life and worsens the survival of these patients. Cancer care for the patients on follow up that is at tertiary level, is also affected due to Covid-19 which refrains them from the assessment of the disease/treatments<sup>30-32</sup>. Fig.1 demonstrates that how the cancer care is affected due to covid-19.

#### 4. Medical Ethics Perspective: Ethical Guideline for Covid-Cancer Management

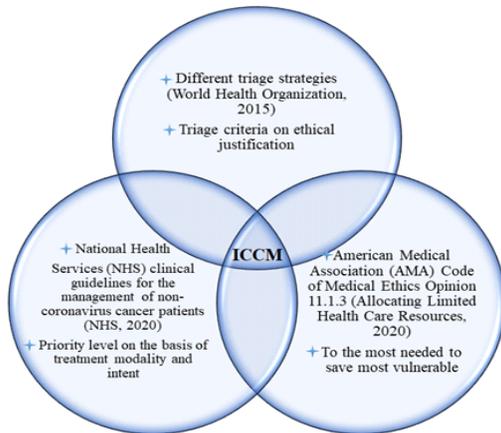
A doctor's primary ethical duty is to provide and promote his patient's well-being in all situations, be it a pandemic like Covid-19. All the policies should aim for the best possible management of allocating scarce health care resources or at least use "triage" in case of scarcity of resources. It is possible to follow multiple triage strategies; each one is based on a different ethical rationale<sup>33</sup>. It is a challenge to provide routine health care facilities during this pandemic and in the case of treating cancer patients; the challenge doubles due to the spreading nature of cancer. Cancer patients with suppressed immunity are more vulnerable to infections and treating them with a routine modality during this pandemic becomes very hard as we need to treat them and simultaneously catering the health care needs which arrived due to the covid-19. Therefore, by adopting the triage guidelines for non-infected cancer patients and allocating them the services they need at that time as part of their oncology care requirements, ethical dilemmas Fig.2 should be addressed<sup>33</sup>, (Allocating Limited Health Care Resources, 2020). Doctors and healthcare providers thus have a responsibility to prioritize the non-coronavirus cancer patients undergoing different modalities of treatment at various stages of their treatment regimen as per the National Health Services (NHS)



**Fig. 1. Cancer care is affected due to Covid-19**



**Fig. 2. Medical Ethical issues to be addressed during the pandemic concerning cancer treatment**



**Fig. 3. An integrated covid-cancer management system (IC-CM) to manage the impact of the covid-19 pandemic on cancer care clinical guidelines for the management of non-coronavirus cancer patients<sup>34</sup> while as for**

coronavirus infected patients treatment should justify harm versus benefit policies. Furthermore, ethical considerations must also be employed in allocating the resources as per the American Medical Association (AMA) Code of Medical Ethics Opinion 11.1.3<sup>35</sup>. The rationale of prioritizing or allocating a resource should be explained to patients always keeping things transparent and ethical morals high. Table 1 summarizes an ethical system of integrated covid-cancer management by amalgamating the three base recommendations of health care management systems and can thus be applied while dealing with cancer patients.

**5. Discussion**

Much has been talked about different systems to be applied to combat the Covid-19 pandemic to prevent the spread of coronavirus infection and some way or the other has severely impacted the lives of all humans as well as the people who already are in urgent need of medical help. Among them are the patients who either are living with cancer or struggling due to its multimodality treatment regimens and multiple treatment sessions. Therefore the care they need and the management of this care delivery should be as per the bioethical principles and all the governments and the health care providers should take a moral clarity that all the lives are counted equal on a rationalized scale. Thereby it becomes an ethical obligation sort of thing to ensure the delivery of care to all the patients living with cancer<sup>36</sup>. Also the allocation of the resources especially for scarce resources coordinated programs via international organizations like WHO can be sought to help developing or disadvantaged countries<sup>37</sup>. Regarding the management of treatment of cancer amid pandemic, a kind of integrated covid-cancer management has been suggested in this review to deliver the care on time with ethical reasoning so that every cancer affected patient should not get upset with the health care providers if they alter their treatment regimen or while prioritizing one patient above the other or while allocating the scarce resource to one over other Table 1. One should always put him/herself in their position and should feel their state of mind that being neglected or under prioritized can lead to severe depression and the patient may lose his/her confidence in the health care system. Thus keeping an ethical consideration in mind while altering any treatment regimen of any cancer patient, the reasons for the new treatment regimen should be explained thoroughly to the patient and/or his caretakers, to avoid trust issues between them and the health care providers. Otherwise, cancer patients may feel that they are considered a 'burden' by the health system,

**Table 1. Integrated Covid-Cancer Management for timely care to cancer patients**

Different triage strategies (World Health Organization, 2015)		National Health Services (NHS) clinical guidelines for the management of non-coronavirus cancer patients (NHS, 2020)		American Medical Association (AMA) Code of Medical Ethics Opinion 11.1.3 ( <i>Allocating Limited Health Care Resources</i> , 2020).
Triage criteria	Ethical Justification	Priority level	Patient group	Allocate scarce health care resources fairly among patients, in keeping with the following criteria:
Save Greatest number of people	By prioritizing allocation so that most of people are saved	<b>Patients undergoing surgery</b>		a) Base allocation policies medical need, the urgency of need, likelihood and anticipated duration of benefit, and change in life quality.  b) Give priority to patients for whom treatment will avoid premature death or extremely poor outcomes, then to patients who will experience the greatest change in the quality of life, when there are very substantial differences among patients who need access to the scarce resource(s).  c) Use an objective, flexible, transparent mechanism to determine which patients will receive the resource(s) when there are no substantial differences among patients who need access to the scarce resource(s).  (d) Explain the applicable allocation policies or procedures to patients who are denied access to the scarce resource(s) and the public.
		Priority level 1a	Emergency—operation needed within 24 h to save the life	
Priority level 1b	Urgent—operation needed with 72 h			
First come, first served	By prioritizing allocation to whoever accesses first, as emergency is for all	Priority level 2	Elective surgery expectation of cure	
Protect most vulnerable	By prioritizing allocation to the most vulnerable	Priority level 3	Elective surgery can be delayed for 10–12 weeks will have no predicted negative outcome.	
Equal access	Each person is given equal access the resource	<b>Patients on systemic anti-cancer</b>		
		Priority level 1	<ul style="list-style-type: none"> <li>• Curative therapy with a high success chance</li> <li>• Adjuvant (or neo)</li> </ul>	
Priority for the most important	By allocating resource to important individuals of the society e.g., first responders, health care workers)	Priority level 2	<ul style="list-style-type: none"> <li>• Curative therapy intermediate chance of success.</li> <li>• Adjuvant (or neo) therapy</li> </ul>	
		Priority level 3	<ul style="list-style-type: none"> <li>• Curative therapy of a low chance</li> <li>• Adjuvant (or neo)</li> <li>• Non-curative therapy</li> </ul>	
		Priority level 4	<ul style="list-style-type: none"> <li>• Curative therapy with a very low</li> </ul>	
		Priority level 5	<ul style="list-style-type: none"> <li>• Non-curative therapy</li> </ul>	
		Priority level 6	<ul style="list-style-type: none"> <li>• Non-curative therapy with an intermediate chance of palliation</li> </ul>	
		<b>Patients on radiation therapy</b>		
		Priority level 1	<ul style="list-style-type: none"> <li>• Patients with category 1 (rapidly increasing) tumours</li> </ul>	
		Priority level 2	<ul style="list-style-type: none"> <li>• Urgent palliative radiotherapy malignant spinal cord compression</li> </ul>	
		Priority level 3	<ul style="list-style-type: none"> <li>• Radical radiotherapy for Category 2 (less aggressive) tumours</li> </ul>	

and their treatments should be set aside to facilitate the saving of human and non-human resources for other initiatives that are generally regarded as more significant. Such a view is rational to trigger feelings of anxiety and fear about the results of their treatments, as well as dissatisfaction and disappointment with the health system, although it may break down the relationship between the doctor and patient and harm the outcome of the treatment<sup>38</sup>. Patient prioritization should reduce the death and serious disability when allocating limited medical services to patients. Intrinsically, neither covid-19 patients nor patients with rapidly growing cancers merit more resources than the other patients.<sup>39</sup> Patients with cancer demonstrate worsening conditions and weak Covid-19 infection outcomes. In cancer patients who are undergoing anti-tumor therapy, vigorous screening for Covid-19 infection is advised and therapies triggering immunosuppression should be avoided or their dosages should be reduced in the case of Covid-19 co-infection<sup>40</sup>.

## 6. Decisions Policies and Strategies

Decisions during pandemic times should be very much justifiable and can rely on the institutional policies to manage pandemic at the department level keeping the bioethical principles in mind table 1 Fig. 2. shows all the ethical delimas that need to be fulfilled and addressed during the pandemic. In a pandemic, we may need to move from a focus on respect for the autonomy of the patient (the first of Beauchamp and Childress's principles) to an emphasis on social justice (the fourth principle). But, it is critically important that we obey the advice of Kant to value the autonomy of the patient. What is being done and for what reasons, the patient demands to know. If we deviate from long-standing standards, this needs to be fully shared with the patient to make them fully aware. Kant stressed the significance of the categorical imperative, "Act only according to the maxim whereby you can, at the same time, will that it should become a universal law." This "golden rule" should still hold sway<sup>41</sup>.

## 7. Conclusions

Oncological care in this Covid-19 pandemic should be handled very seriously, and a fine-scale balance should be maintained between deferring or delivering cancer patients' treatment. We recommend that a justifiable approach be applied and integrate the available recommendations as shown in Fig.3. Optimal patient care should be provided by identifying the cancer stage and the kind of cancer the patient is suffering by following the

integrated covid-cancer care management system. Furthermore, all the potential delay factors viz delay at diagnosis. Delay to the start of therapy (systemic/adjuvant) should be minimized by optimizing and adapting the methods that would not alter the outcome in treating these patients. Crisis management strategies such as triage to classify emergencies justified changes to treatment procedures and telemedicine services can be used so that care delivery is not delayed.

## Limitation & Future Scope

Our study was a short cross-sectional review-based study. If cancer care strategies management develops specific other justifiable management criteria, this study can be extended and updated.

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