



# Socio-Cultural and Economic Impact of Corona Virus on Cancer Patients, Caregivers and Survivors

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Corona Virus Disease -19 (COVID-19) pandemic has a widespread impact on social, cultural and economic aspects of life. It has affected cancer patients in a big way because with onset of COVID-19 pandemic, the healthcare resources were diverted to handle Corona virus infection. The cancer patient, their caregivers and healthcare professional are in dilemma of whether to continue the treatment or stop it for some time till COVID-19 infection settled down. The long-lasting effect of COVID-19 pandemic on socio-economic and mental health of cancer patients and health care workers will emerge in times to come. It is important that a tight balance be made between cancer treatment and its interruption due to COVID-19.

## Introduction

World is facing a global health crisis unlike before. The novel COVID-19 pandemic has affected economic activities throughout globe including the health care industry. This has adversely affected people with chronic conditions such as cancer. Since Cancer treatment is time sensitive, immunocompromised patients appear to be at increased risk of COVID-19, and their outcomes are worse than individuals without cancer [1].

Elderly cancer patients having leukemia and other systemic co-morbidity are at a higher risk of ICU admission and even death. Patients on active cancer treatments such as chemotherapy, immunotherapy, radiotherapy, post bone marrow transplants and the survivors are vulnerable for COVID-19 infection.

## Challenges in Delivering Care and Dilemma

As COVID-19 settles into the day to day reality across the globe, the question of how to keep at-risk patients safe from infection continues to be a challenge, particularly for cancer patients. While tele-consultations are increasing, but this virtual mode of communication has lot of limitation in terms of patient assessment and management. Also, tele-consultations are more of a use to follow up cases and not for newly diagnosed or patients under evaluation. There is a concern among patients of what happens if one stops, delays or switches the cancer treatment. Therefore, delaying or postponing cancer treatment due presumed increased risk of infection with COVID-19 is a matter of debate and dilemma.

According to the American Society of Clinical Oncology (ASCO), "There is no direct evidence to support changes in cancer regimen during the pandemic" [2]. Therefore, routinely stopping anticancer therapy is not recommended. But the fact is that oncosurgery, chemotherapy and radiotherapy is being rescheduled due to prevalent condition of Corona virus infection. It is also

unclear that for how long the cancer treatment should be hold in a COVID-19 positive patient.

The paradox is exaggerated by the fact, that not treating cancer is even more dangerous as the diseases will continue to progress in the absence of treatment. The magnitude of collateral damage done to Cancer patients during COVID-19 pandemic is unimaginable.

The most unfortunate are the newly diagnosed early stage cancer patients where single modality of cancer care is curable, may become incurable. The chest symptoms (e.g. breathlessness, tachypnea) due to disease progression may be mistaken as COVID-19 infection and managed inappropriately.

Palliation is an ethical obligation even at the time of pandemic. Fewer patients are visiting palliative clinics due to lockdowns. Also, Community based palliative care of advanced cancers are affected significantly as health workers are following social distancing and there is increase demand of their services. Globally, due to increasing numbers of unexpected and premature deaths from COVID-19, the traditional and cultural rituals and ceremonies are prohibited in line with social distancing. Therefore, Families need extra support during bereavement.

## **Fear, Anxiety and Helplessness**

Cancer diagnosis and its treatment-related anxiety and distress adversely affect the mental health of individuals and their families [3-4]. Because of better therapeutic options, the expectations of cancer patients have increased. But due to restrictions imposed in COVID-19 era, a point has come where patients and their caregivers, be it family members and/or health care workers are in a state of indecisiveness causing stress induced anxiety and depression. Their frustrations and anxiety related to constraints of treatment and limited follow up facility can be seen on social media. This has created a sense of loss of control over one's life and feeling of helplessness. On top of the emotional upset some patients are reported with psychosomatic symptoms such as diarrhea, muscle stiffness, headaches, and panic-related symptoms, e.g. sweating or increased heart rate.

The psychological stress in cancer patients during COVID-19 pandemic is due to lack of social security, difficulties in accessing oncology care, economic burden posed by the pandemic. Nothing could be worse than a cancer diagnosis at this time as delays in treatment is inevitable and delaying treatment seems like a double jeopardy. Thus the psychosocial needs of cancer patients and healthcare professionals should be assessed and taken care.

The health workers are no way spared. Many have been tested positive and lost their lives. The dilemma exists between protecting one's life and giving patients a good chance to fight their cancers during the COVID-19 outbreak.

Although tele-medicines are being used, physicians are not able to provide the best care to their patients. This is likely be the case for the next few months and there will be an inevitable impact on mortality and progression rates as the disease is time sensitive. This is also very emotionally challenging for doctors to absorb.

## **Socio-cultural and Economic Impact**

Everything is super-strained in the whole world, be it is logistics of essential commodities to healthcare facilities [5]. Social distancing, wearing a mask, avoiding crowds and frequent hand washing are good preventive strategies against COVID-19 infection. But misinformation in society and prevailing misbeliefs and myths led to isolation of cancer patients and survivors.

Cancer care in developing world is challenging. Because of limited numbers of skilled healthcare professionals and resources in terms of infrastructure, the quality of care is also suboptimal. This has been amplified by the COVID-19 ill effects on healthcare of cancer patients which require urgent measures. The vulnerability of cancer patients can be measured in terms of availability of healthcare services, economic burden and psychological issues arising due to strict lockdowns.

Cancer treatment will change enormously in coming days. It is predicted that the cancer mortality and morbidity will increase, not because of the corona virus pandemic, but because cancer patients would not be treated as they should be normally. The unintentional delays in surgeries and other cancer treatments would result in poor outcomes. Moreover, with shrinking opportunities of earning, loss of job, and travel restrictions, a good proportion of patients will default on their treatment.

Triaging of patients based on risk stratification of cancer therapy and routine follow-up visits during these difficult times, in an attempt to protect vulnerable patients and staff [6]. With the current limitation of goods transfer, there is a possibility of shortage of drugs essential for cancer treatment. The possibility of further delay in treatment and uncertainties could affect the mental health and quality of life of both patient and oncologists.

Free meals and financial support to poor and needy is being provided by the government of India. Financial security in form of insurance for the frontline health workers has been also introduced. Hopefully this will strengthen their courage to fight against cancer and corona both.

Moreover, the ban on social gatherings including religious activities is scientifically justified for containment of COVID-19 infection but is likely to exacerbate the issues related mental health [7].

Few researchers have proposed that India may have some protective immunity against COVID-19 infection. The different factors in relation to COVID-19 infection, its virulence and patient outcome need to be ascertained with evidence. These include high temperature and humidity, age, widespread BCG vaccination and resistance to malaria. Also, whether these factors have a role to limit the severity of COVID-19 infection in Indian context needs to be established with robust data.

Due to lack of clinical evidences, BCG vaccination is not recommended by World Health Organization (WHO) for the prevention of COVID-19 [8]. However, WHO continues to recommend neonatal BCG vaccination in countries or settings with a high incidence of tuberculosis [9]. Therefore, further clinical trials are required to establish a true link between COVID-19 and BCG or malaria burdens.

In conclusion, no one knows what choices to make for cancer patients and what is the right suggestion to be advocated in view of fear of cancer recurrence, progression to a higher stage and loss of life due to inability to access the system amid COVID-19 pandemic. It is scary for oncologists, and of course, for many cancer patients, survivors and the caregivers.

Multidisciplinary approach using innovative ways to collect empirical data of cancer patients and available health care facilities is the need of the time. This will help to formulate policies for cancer care in the face of the pandemic.

With the positive collaborative efforts, we can win this war against the pandemic. We know this pandemic will be tackled over a period of time, but it will leave an unforgettable impact on cancer patients and their caregivers along with oncologists who are helpless on deciding whether “to treat or not to treat.”

Oncologists have to think out of box to deal with cancer patients during the time of health emergencies. A special emphasis is warranted for cancers in elderly patients as they are more prone for adverse outcomes both because of disease and COVID-19.



Apart from educating our cancer patients, we must try to practice hygiene along with social distancing, as infection to one healthcare professional will force all contacts to go into quarantine affecting the whole system very badly.

Patients should be advised to take consultations via electronic mediums rather than physical visits. Healthcare professionals need good communication skills to counsel and advice the patients through tele-medicine.

To summarize, interdisciplinary resource team should be to created policy for combating COVID-19 infection during cancer care, strategize to reduce personal visits and empowering patients and caregivers through use of communication using digital technology. In addition, palliative and supportive care services for people with advanced cancer during the COVID-19 outbreak should be made available through various platforms i.e. tele-consultation, engaging nongovernmental organizations (NGO), and volunteers.

## References

## References

1. Liang Wenhua, Guan Weijie, Chen Ruchong, Wang Wei, Li Jianfu, Xu Ke, Li Caichen, Ai Qing, Lu Weixiang, Liang Hengrui, Li Shiyue, He Jianxing. Cancer patients in SARS-CoV-2 infection: a nationwide analysis in China. *The Lancet Oncology*. 2020; 21(3)[DOI](#)
2. Disruptions in Cancer Care in the Era of COVID-19 [Internet] Medscape [http://www.medscape.com/viewarticle/927215].
3. Pitman Alexandra, Suleman Sahil, Hyde Nicholas, Hodgkiss Andrew. Depression and anxiety in patients with cancer. *BMJ*. 2018. [DOI](#)
4. Walker J., Holm Hansen C., Martin P., Sawhney A., Thekkumpurath P., Beale C., Symeonides S., Wall L., Murray G., Sharpe M.. Prevalence of depression in adults with cancer: a systematic review. *Annals of Oncology*. 2013; 24(4)[DOI](#)
5. Fornaro L, Wolf M. Coronavirus and macroeconomic policy [VoxEU.org] [https://voxeu.org/article/coronavirus-andmacroeconomic-policy]. 2020.
6. Simcock Richard, Thomas Toms Vengaloor, Estes Christopher, Filippi Andrea R., Katz Matthew S., Pereira Ian J., Saeed Hina. COVID-19: Global radiation oncology's targeted response for pandemic preparedness. *Clinical and Translational Radiation Oncology*. 2020; 22[DOI](#)
7. Binka Charity, Nyarko Samuel Harrenson, Awusabo-Asare Kofi, Doku David Teye. "I always tried to forget about the condition and pretend I was healed": coping with cervical cancer in rural Ghana. *BMC Palliative Care*. 2018; 17(1)[DOI](#)
8. [https://www.who.int/news-room/commentaries/detail/bacillecalmette-gu%C3%A9rin-\(bcg\)-vaccination-and-covid-19](https://www.who.int/news-room/commentaries/detail/bacillecalmette-gu%C3%A9rin-(bcg)-vaccination-and-covid-19).
9. BCG vaccines: WHO position paper – February 2018. Vaccins BCG: Note de synthèse de l’OMS – Février 2018. *Wkly Epidemiol Rec*. 2018; 93(8):73-96 . Published 2018 Feb 23.