Abstract

The coronavirus disease 2019 pandemic has evolved into a pandemic of unheard proportions. Given the havoc wreaked by this pathogen worldwide, many countries have adopted an extreme, legally enforced method of social distancing, in the form of a lockdown. Unless appropriate preventive steps are taken, the cost of the pandemic and ensuing lockdown may prove to be irreparable. The evident implications of this lockdown, such as the escalating levels of unemployment, impending economic collapse, and severe food shortage faced by the sudden unemployed migrant labor population, have been widely reported. Cancer patients are a particularly vulnerable group even during nonpandemic times, often presenting late in the course of their disease, without the resources needed to avail recommended treatment. The prevalence of psychiatric complications and emotional distress is significantly higher than in the general population, and the trauma of both the pandemic and subsequent lockdown adds significantly to their mental trauma. This review is aimed toward addressing the problems faced by cancer patients in the face of this pandemic and subsequent lockdown, with a glimpse into possible solutions that can be implemented.

Keywords: Cancer, coronavirus disease 2019, pandemic, psychosocial impact

Introduction

The novel severe acute respiratory syndrome coronavirus 2 originated from the Wuhan district of China in December 2019 and has exponentially spread across the world, with more than 2.1 million confirmed cases and 149,000 deaths as of April 18, 2020, and counting.[1] The implementation of the strict nationwide lockdown has caused financial, social, and psychological distress. Moreover, these consequences are mainly faced by the vulnerable and economically weaker and sections of the society.[2]

Cancer patients form a vulnerable group, with a higher prevalence of emotional distress and mental health disorders, as compared to the general population, with a third of all cancer patients developing a certain form of psychiatric complications.[3] Furthermore, they face numerous challenges unique to a developing country like India, such as more than 75% of cases presenting in advanced stages, financial constraints, the need to travel vast distances to avail treatment, and the stigma associated with the illness.[4] The paltry expenditure of GDP on health care is evident by the fact that cancer treatment costs are born as out-of-pocket expenses, in more than 80% of the cases.[3] Given the high cost of cancer therapy, which involves multidisciplinary approaches, prolonged treatment durations, and tertiary health-care facilities, cancer care remains a distant dream for a significant proportion of patients. A diagnosis of cancer is the most dreaded news any patient can receive. It usually implies expensive treatment, infrequent curative outcomes, emotional suffering for both the patients and their caregivers, and an immensely morbid treatment, often handicapping the sole bread earner of a family.

The effect of the lockdown

The coronavirus disease 2019 (COVID-19) pandemic and ensuing lockdown has posed several challenges for cancer patients, delivery of cancer treatment, as the patients...
are unable to visit the cancer treatment facility, procure necessary drugs, or reach the cancer care provider locally for treatment continuation. The oncologist has to strike a balance between undertreatment of cancer, with resultant increase in cancer-related mortality and mortality due to COVID-19 in the vulnerable cancer patient. Various international organizations have published cancer treatment guidelines based on disease stage taking into account potential benefits versus risk of cancer treatment during the COVID-19 crisis. However, these are not based on robust evidence.[6]

The psychosocial impact
There are many sources of emotional distress in patients with cancer during the COVID pandemic. They are:

1. Poorly controlled symptoms arising from a lack of access to symptom control services and treatment
2. Worsening of preexisting mental health conditions due to a lack of access to mental health professionals and treatment
3. Distress associated with limited access to cancer treatment, curtailment of care, uncertainty about course of treatment, disease progression, and premature death
4. Distress associated with accessing cancer services and risk of contracting COVID-19 on a background of immunosuppressive state
5. Social distress associated with social isolation, stigmatization of illness, separation from family, loss of employment, and poverty.

The estimated prevalence of psychosocial distress is between 35% and 55%.[7] The International Psycho-Oncology Society mandates routine screening of emotional distress and has termed it as the “sixth vital sign” in cancer care. It has recommended integrating psychosocial care into routine cancer care.[8] The provision of psychosocial support is vital in decreasing the levels of stress, anxiety, and depression in cancer patients.[9] The COVID-19 pandemic has led to discontinuation of cancer treatment further compounds the emotional distress faced by cancer patients. A study done in China during the quarantine in Wuhan showed that up to 35% of people experienced psychological distress.[9] The emotional impact is also evident in another study from China, which showed that 16.5% of general population had moderate-to-severe depressive symptoms, 8% suffered from stress, and more than 28% had anxiety which was moderate to severe.[10] Disruption of cancer care occurs as an unfortunate result of the lockdown with lack of radioisotopes for imaging, supply constraints for imported equipment, and shortage of blood in blood banks.[11] This results in an increased fear of disease progression, which is supplemented an increased risk of contracting severe disease due to immunosuppression. Uncertainty about when they will receive treatment for a growing cancer may lead to resentment against the hospital staff. Patients on palliative care are now unable to meet their family members and are faced the very understandable fear of dying alone. This could result in unresolved grief culminating in a lifetime of guilt for family members who could not be there to support a loved one during his final hours. Setting up video conferencing facilities to connect with patients’ relatives would go a long way in reducing the anxiety of the patients by providing a familiar, although digital presence.

With most hospitals running on the bare minimum number of staff needed to function, it may no longer be possible for a trained psychiatrist or social worker to provide counseling to every patient. This provides an opportunity to train clinicians in the largely neglected field of psycho-oncology, which has been proven to have a profound impact on both patients and their families, resulting in a better quality of life during and after treatment.[12] Counseling, which forms the backbone of psycho-oncology, is a skill that surprisingly few clinicians are trained to deliver.[13] Counseling should not be a one-time event, but should evolve with the treatment and progression or regression of the patient’s disease. It is of paramount importance not only to patients who have exhausted all options, but also it is assuming an equally important role today in cancer survivors. Reassurance, provision of coping strategies, and education to guide patients through the endless stream of misinformation go a long way in rehabilitation. Training oncologists in the basics of counseling will allow patients to normalize emotions such as grief, anger, and regret empowers them to better take control of their lives. The traditional forms of psychosocial support involving support groups may need to be reinvented, with the new infection control practices and social distancing norms, and group therapy may need to be delivered through conference call. Simple word choices have been shown to have a profound effect,[14] and training clinicians in the art of right word choice could help to significantly reduce the negative perception of treatment by patients. For example, just use of supportive care instead of palliative care has been shown to impact patient choice.[15] There are numerous examples of commonly used phrases which result in a negative psychological impact. A comprehensive list of these phrases to be avoided is available as a toolkit at vitaltalks.org (https://www.vitaltalk.org/guides/covid-19-communication-skills/).

The role of pharmacotherapy is vital in managing cancer-related depression and anxiety. A possible way to continue running hospitals with minimal staff would be to allow treating clinicians to prescribe appropriate drugs after telephonically consulting mental health professionals.[16]

A list of commonly encountered psychological issues and suggested interventions is described in Table 1.[17] (adapted from Singhai P, Rao KS, Rao SR, Salins N. Palliative care for advanced cancer patients in the COVID-19 pandemic).

**Palliative care in cancer and coronavirus disease 2019 pandemic**

Patients receiving palliative cancer care are less likely to receive treatment during the pandemic. This has been due to recommendations from many bodies, including ASCO, to consider deferring of anticancer treatment if the estimated risk of infection outweighs the benefit.[18] Most centers would
Breathlessness, which is another common complaint in terminal cancer patients, is complicated by the epidemic. Use of aerosol-generating equipment like nebulizers is discouraged and it is safer to have patients use MDIs with attached spacers. Nonpharmacological approaches, such as upright posture, cooling the face with a cold towel, and reassurance, should be supplemented with oxygen support. Morphine can be used to relieve the distress associated with breathlessness, up to a maximum of 40 mg/day. Anxiety and hyperventilation associated with breathlessness can be quickly controlled with lorazepam 0.5 mg HS (titrated to response, with a maximum dose of 4 mg/day). The intended goal of treatment should be discussed in detail with both the patient and relatives. The preferences for intubation need to document well in advance, to avoid unnecessary intensive care unit (ICU) admissions in a situation wherein the demand for ICU beds and ventilators is expected to rise exponentially.

**CONCLUSION**

Cancer care in India is fraught with challenges such as financial challenges, inaccessible tertiary healthcare facilities and lack of awareness and screening programs. This leads to advanced presentation in majority of patients. Cancer has a significant psychosocial impact on both the patients and their caregivers. The recent COVID-19 pandemic has worsened inequitably distributed cancer care facilities, preventing a large proportion of patients from accessing medical care when they need it the most. While a comprehensive policy, at both the state and national level, to address the logistic difficulties of transporting patients and the financial issues faced due to a loss of employment is definitely needed, the psychosocial impact of the epidemic should not be overlooked. Simple and easy to implement measure such as appropriate use of technology to allow for delivery of services while reducing exposure and training of frontline staff in the delivery of psychosocial support will go a long way in enabling cancer patients to survive this pandemic.

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**Conflicts of interest**

There are no conflicts of interest.

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**Table 1: Commonly encountered psychological issues and suggested interventions**

| Psychological issues                  | Interventions                                      |
|---------------------------------------|---------------------------------------------------|
| Fear, anxiety, adjustment disorders, depression | Psychological first aid                            |
|                                       | Support, rapport, reassurance                      |
|                                       | Timely information                                 |
|                                       | Normalizing stress and grief                       |
|                                       | Supporting positive thoughts and coping            |
|                                       | Empowering decision-making, sense of control      |
|                                       | Teaching mindfulness, relaxation, yoga to reduce stress, and hyperarousal |
|                                       | Maintaining sleep hygiene                          |
|                                       | Normalizing anger while reducing anger-driven behaviors |
|                                       | Establishing connectedness through social media    |
|                                       | Pharmacological                                    |
|                                       | Benzodiazepines, with selection based on availability, half-life, duration of action |
| Grief and bereavement                 | Grief and loss counseling                          |
|                                       | Bereavement follow-up                              |
| PTSD                                  | Nonpharmacological intervention                   |
|                                       | CBT                                               |
|                                       | EMDR                                              |
|                                       | Pharmacological intervention                       |
|                                       | SSR1/SNRI                                         |
|                                       | Quetiapine monotherapy                             |
|                                       | Alpha-adrenergic receptor blocker – prazosin       |

SSRI: Selective serotonin re-uptake inhibitor, SNRI: Serotonin norepinephrine reuptake inhibitor, CBT: Cognitive behavior therapy, EMDR: Exposure therapy and eye movement desensitization and reprocessing, PTSD: Posttraumatic stress disorder.
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