

**PSYCHOSOCIAL IMPACT OF THE COVID-19 PANDEMIC ON PATIENTS WITH
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AIM

The aim of the current review is to explore the impact the COVID-19 pandemic had on different cancer patients and their ability to access the healthcare system and treatment.

INTRODUCTION

Currently, the COVID-19 pandemic is overwhelming healthcare services worldwide. The impact of the pandemic has been particularly evident among communities where it has affected the lifestyles of many resulting in social isolation, financial insecurity and mental health problems and disrupting working patterns and the schooling system. The psychological distress related to the pandemic affects many people, and anxiety is an expected reaction in such a scenario.

Cancer disease is not uncommon, it affects the lives of patients as well as their families. According to the WHO reports, the highest cancer-related mortality is due to lung, colon, liver, stomach, and breast cancer.^[1-3] The 2017 UK data regards breast cancer as the most frequent diagnosed cancer in both genders (after exclusion of non-melanoma skin cancer), with over 55,000 new cases diagnosed yearly, which means it accounts for about 15% of all newly diagnosed cancers and is also considered to be the most frequently encountered cancer in women.^[4]

Cancer patients are exposed to and are at risk of a wide range of different complications such as mental health issues (anxiety, depression, vulnerability) and physical problems (compromised immunity, widespread infection, anaemia, weight loss, metastatic disease, early death). Since the COVID-19 pandemic started in December 2019^[5,6] the risk of mental health deterioration has markedly increased. Patients are concerned about possible neglect or receiving suboptimal treatment of their cancer due to the health services being engulfed with COVID-19 pandemic patients (Fig.1). In addition, the situation can confuse patients with cancer to the extent that they decline the offered treatment or refuse to continue their chemotherapy for the fear of infection. An increased rate of therapeutic non-compliance may result

in disease progression and worsening of their condition (Table1).

To avoid the negative impact of the COVID-19 pandemic on cancer survivors and ensure that their health and support needs are addressed appropriately, psychological support providers must implement strategic changes in the provision of access to healthcare and the supportive social services.^[7] Amaniera et al, in 2021, published a paper with results of a study conducted on 281 cancer patients during the COVID-19 pandemic: 76% of them reported social isolation and 70% had a remarkable impact on their mental health and well-being. Isolation appeared to correlate significantly with the impact on mental health ($p < .00001$).^[8] Pigozzi et al, in 2021, published a review related to the psychological impact of the COVID-19 pandemic on patients diagnosed with cancer. This study was conducted in the Verona area in Italy and the cancer patients were treated at the Oncology Departments in four hospitals. A 13-item ad hoc questionnaire was sent to 474 patients. The collected information was related to demographic data (age, gender) and the disease criteria (primary tumour type, stage, performance status and management) were collected and analysed.^[9]

The majority of patients (90%) reported strong family support as well as the same level of appropriate support from the healthcare providers. The *Emotional Vulnerability Index* (EVI) was used to assess the patient response during the pandemic, 44% of the cohort reported a 3–4 score meaning that they were unable to cope easily with their cancer diagnosis, compared to 39% rate prior to the pandemic. The EVI elements include anxiety, feeling of sadness/depression, vulnerability, negativity, disorientation, sleep disturbances and apathy. The results also revealed that female gender and chemotherapy had a significant association with the

feeling of emotional vulnerability among the younger age group (≤ 65 years).^[9]

Momenimovahed et al, in 2021, published a systematic review of literature discussing the psychological distress among cancer patients during COVID-19 pandemic in the world. The review included 55 articles. The results of this paper revealed that the rate of the psychological disorders had a climbing trend during the COVID-19 pandemic. A review of similar researches conducted during the pre-pandemic period showed that 20% of patients had a significant degree of psychological distress. The outcome of this paper revealed that the COVID-19 pandemic substantially affected the mental health of patients with cancer disease. Fear of encountering COVID-19 infection, fear of cancer disease progression, disruption of healthcare delivery, and potential immunocompromised status were the most common factors associated with psychological distress in

cancer patients. This also had a significant impact on patients treatment option choice.^[10]

In another report from the USA Frey et al (2020) published the results from 555 participants treated for ovarian cancer during the pandemic.^[11] 88.6% of the cohort showed signs of psychological impact from the pandemic. About 51.4% suffered from anxiety and 26.5% had depression. The results also showed that 33% of the participants experienced some delay in their cancer care. In 24.0% of the cohort, there was a delay in physician clinic appointment, 15.1% had delayed laboratory investigations, and 9.6% had a delayed cancer-related radiological investigations. Out of the group scheduled for surgery, 26.3% had experienced a delay in surgery, also a delay in commencing treatment was noticed in 8.3% of the participants scheduled for nonsurgical cancer management.^[20]

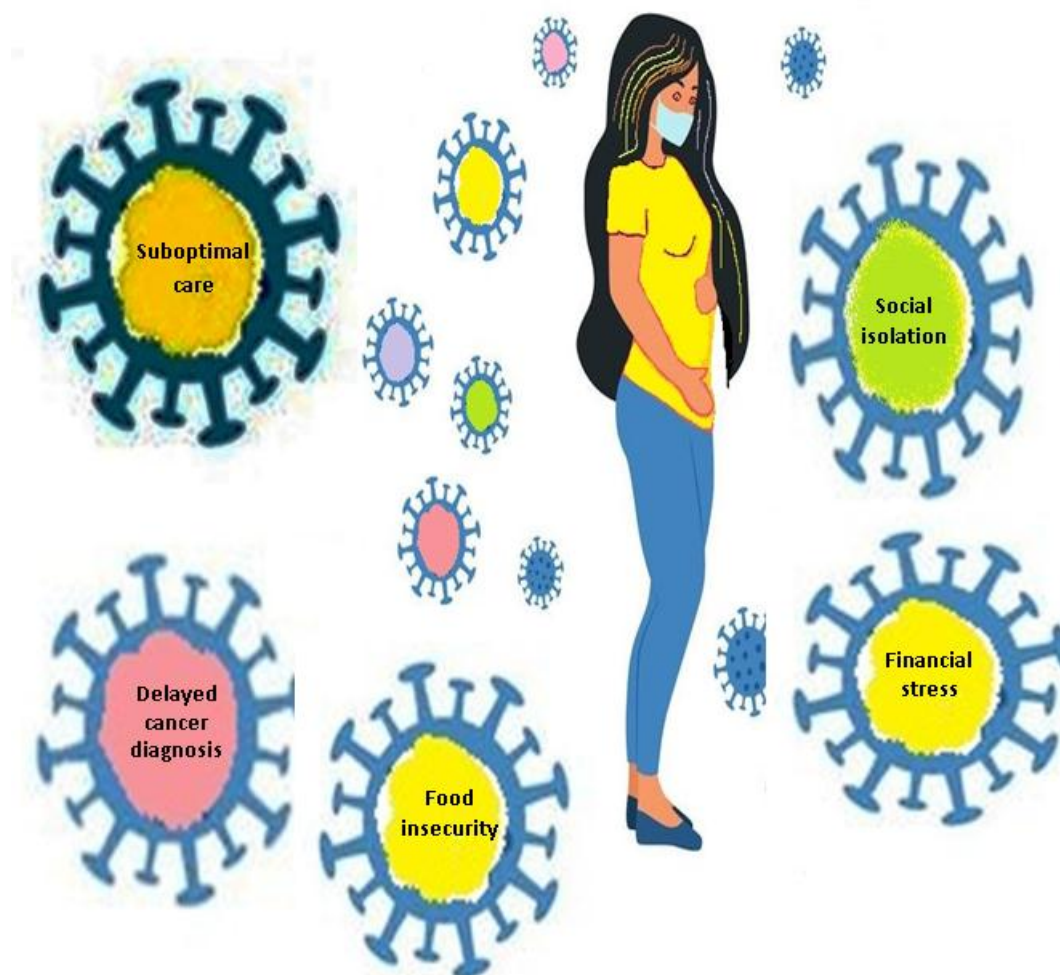


Fig. 1: Factors that may influence the mental health of cancer patients.

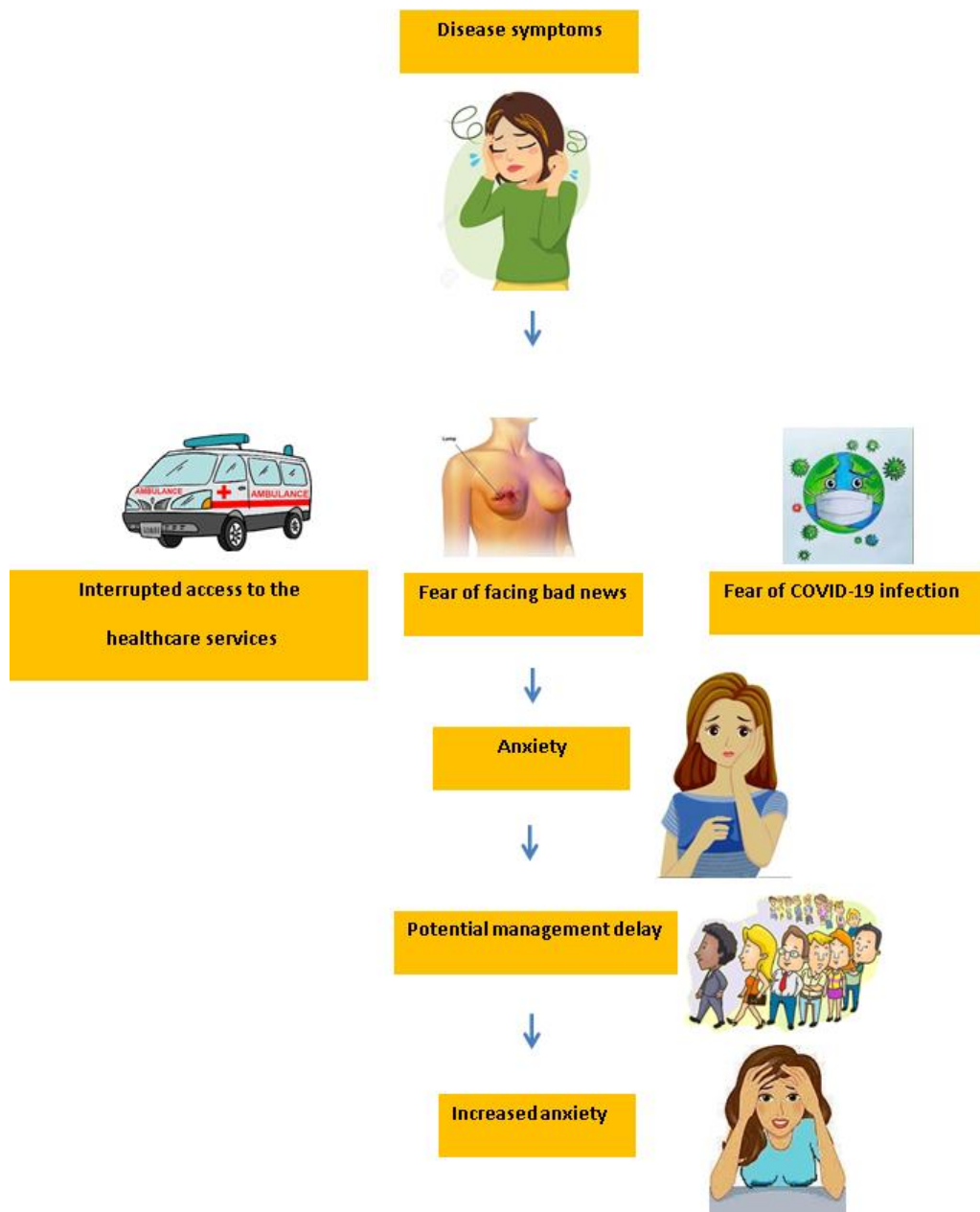


Fig. 2: Factors contributing to increased anxiety during the COVID-19 pandemic.

Table 1: The impact of COVID-19 pandemic on the mental health of cancer patients, general population and healthcare workers exposed to coronavirus disease 2019.

Author, year	Country	Cohort	Anxiety	Depression	Insomnia	PTSD	Cancer type
Symptoms among cancer patients							
Frey et al, 2020 ^[11]	USA	555	51.4%	26.5%	-	-	Ovarian cancer
Juanjuan et al, 2020 ^[12]	China	658	8.9%	9.3%	4.0%	-	Breast cancer
Chen et al, 2021 ^[13]	China	834	15.5%	21.6%	14.7%	-	Breast cancer
Wang et al., 2020 ^[14]	China	6213	17.7%	23.4%	-	9.3%	-
Toquero et al, 2021 ^[15]	Spain	104	42.3%	58.6%	-	-	-
Romito et al, 2020 ^[16]	Italy	77	36%	31%	-	36%	Lymphoma
Cui et al, 2020 ^[17]	China	207	62.8%	51.2%	51.2%	35.5%	Breast cancer
Symptoms among general population							
Shi et al, 2020 ^[18]	China	56 679	31.6%	27.9%	29.2%	-	N/A
Symptoms among Healthcare Workers Exposed to Coronavirus Disease 2019							
Lai et al, 2020 ^[19]	China	1257	44.6%	50.4%	34.0%	-	N/A

CONCLUSION

Our review concludes that the COVID-19 pandemic had a significant psychological impact on cancer patients. The related factors include fear of delayed diagnosis and potentially receiving suboptimal treatment, as well as stress related to social isolation, and difficulties in accessing cancer treatment services. Awareness of healthcare providers is needed for directing more attention to the mental status of the cancer patients during the pandemic, also there is a need for building the framework to provide appropriate mental healthcare to cancer patients.

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