

Letter to the Editor

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Running Title: Oncology Services in Dubai Health Authority during the COVID-19 Pandemic

Provision of Oncology Services in Dubai Health Authority during First Wave of COVID-19 Pandemic: A Pragmatic Approach

Muhammad Farooq Latif[♦], MD, Syed H. Tirmazy, MD, Dalia El-Shourbagy, MD, Abdul Q. Basit, MD, Kaltar Das, MD, Mohamed Omara, MD, Dina Hamza, MD, Susheel Kumar, MD, Nezar Ahmed Salim, MSc, Shila Sajan, PhD

Medical Oncology Department, Dubai Hospital, Dubai, UAE

♦Corresponding Author

Muhammad Farooq Latif, MD

Department of Medical oncology, Dubai Hospital, Dubai, UAE

E Mail: drfarooqlatif@hotmail.com

Dear Editor-in-Chief,

In March 2020, the World Health Organization (WHO) characterized corona virus disease-19 (COVID-19) as a pandemic.¹ Over 80 million people have been infected and 1.5 million confirmed deaths have been reported globally. It is not entirely clear whether cancer diagnosis and treatments increase the risk of complication in the COVID-19 infection. Several studies have reported higher rates of intensive care unit admission, invasive ventilation, and deaths due to the COVID-19 infection in cancer patients.² Early data from a retrospective study reported high risks of severe events if anticancer therapy was administered within two weeks of developing the COVID-19 infection.³ However, in a large prospective observational study, the data from the UK Coronavirus Cancer Monitoring Project (UKCCMP) did not report any evidence of a higher risk of mortality from the COVID-19 infection in cancer patients on cytotoxic therapy or other anticancer treatments.⁴ First confirmed case of COVID-19 in the United Arab Emirates was reported in January 2020. Being a major international transit hub, the government of the UAE has taken strict

measures to contain the spread of the virus. Dubai Health Authority (DHA) is a governmental entity providing medical care in the Emirate of Dubai. The oncology department of the Dubai Hospital (DH) manages approximately 20% of the UAE cancer population. Cancer care is often complex requiring input from other healthcare specialties. Owing to the requirements of COVID-19 pandemic to reduce social contact and implement social distancing, the oncology department in Dubai hospital carried out several practical measures to ensure a safe and effective delivery of service.

DHA implemented the use of telemedicine very early in the COVID-19 pandemic. The majority of outpatient consultations were performed telephonically. Oral treatment prescriptions were sent to patients electronically and in selected patients, medicines were delivered at home through DHA Dawaaee system. Subcutaneous anti-cancer treatments were delivered in primary healthcare centers to reduce hospital visits. Outpatient pre-treatment laboratory investigations were requested electronically through the DHA Epic system linked to the local

primary healthcare centers and patients were advised to visit nearest clinics for tests. A triage area was designated in the oncology department to screen all attending patients. Oncology patients' management plans were reviewed and in high-risk patients requiring chemotherapy in curative settings, the use of granulocyte colony-stimulating factors (G-CSF) was encouraged to maintain dose intensity. To reduce the risk of febrile neutropenia in patients receiving palliative systemic therapy, chemotherapy dose modifications and treatment interruptions were preferred. Weekly treatments were changed to biweekly or triweekly regimens, where possible, and intravenous treatments were converted to outpatient oral therapies to reduce hospital visits, less myelosuppressive treatments were also recommended. Due to the lack of operation theatre, ICU capacity, and the interruption of surgical services at the peak of the pandemic, selected patients were offered preoperative systemic therapies/bridging therapies. Multidisciplinary team meetings were held virtually using Microsoft Teams application while direct digital communication amongst the departments was encouraged.

As a precautionary measure from the very early stages of the pandemic, the oncology inpatient department was isolated to reduce the risk of infection. The medical data and the management plans of individual patients were reviewed by a team of oncologists and discharge plans and home care were implemented where possible. The COVID-19 suspected cases were admitted to a designated area in the hospital outside the oncology unit. Family visits to hospital were restricted and family counselling sessions were conducted over the phone. Patients visiting the infusion center for intravenous treatments were screened for the symptoms of COVID-19 and suspected patients were referred to the primary healthcare centers for COVID-19 PCR test.

Oncology department in DHA played a leading role in the repatriation of patients from overseas to ensure the continuity of cancer care in the UAE. In collaboration with DHA overseas office, direct communication was established with the overseas hospitals in the USA, Europe, and Asia. On arrival in the UAE, patients were reviewed by specialist mobile oncology teams and quarantined in designated healthcare

facilities in accordance with national guidelines. Cancer treatments were resumed after quarantine, and selected patients were referred to other healthcare facilities for specific treatments. To provide psychosocial support to cancer patients, DHA organized webinar sessions with a team of oncologists, psychologists, and support staff. Oncology staff, including physicians and nurses were provided regular education and support during the pandemic. Several of the oncology staff with symptoms or a history of contact with the COVID-19 patients were tested with COVID-19 PCR through the DHA staff clinic. Following the successful management of COVID-19 in the early and the peak phase in Dubai, a comprehensive recovery plan with the gradual reinstatement of services was devised. Since June 2020, COVID-19 PCR screening has been mandatory for all patients requiring admission in DH. Outpatient clinic capacity was increased by 25% every four weeks and oncology services were fully resumed in September 2020. At the time of writing this letter, the number of COVID-19 cases have surged in the UAE, however, Dubai hospital remains a COVID free facility. (Figure 1)

Managing cancer care during a major pandemic poses a unique challenge. Decision-making process should take into consideration all factors, including risks associated with pandemic and adverse outcomes related to the delay in cancer treatment. Good communication with patients, colleagues, and policy makers is vital. Reviewing guidelines regularly and reporting adverse events can help to improve treatments and outcomes. We introduced a plan of care that included strict precautionary measures and an individualized assessment process to ensure the safe and timely delivery of cancer treatment. With the above measures in place, we did not experience any added cancer treatment-related toxicities.

Conflict of Interest

None declared.

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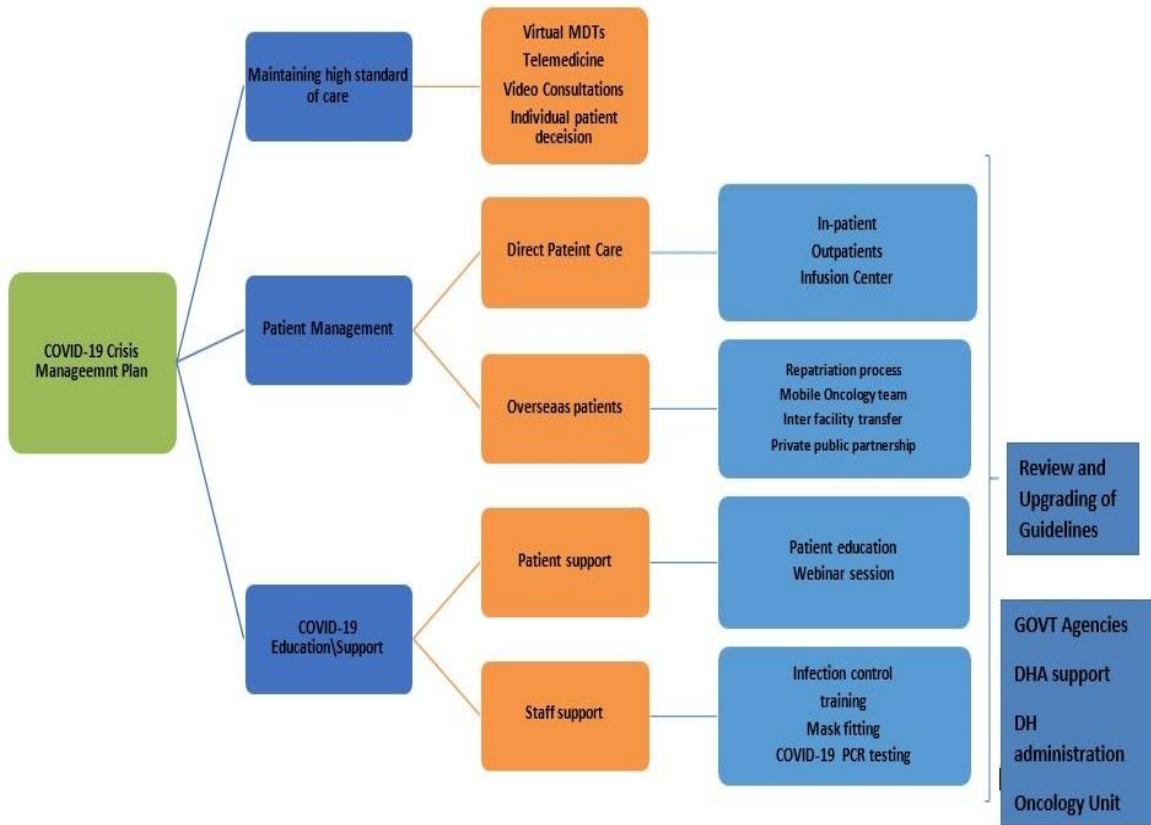


Figure 1. COVID 19 Crisis management plan was devised for oncology patients.

DHA: Dubai Health Authority, DH: Dubai Hospital, MDT: Multidisciplinary teams, COVID-19: corona virus disease 19