

Targeting DNA damage response and an unusual cause of dysphagia.

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Introduction

Pancreatic ductal adenocarcinoma (PC) is the fourth highest cause of cancer-related fatalities in developed countries, with a dismal five-year survival rate of only 8% [1]. PC has experienced minimal progress in patient survival over the last four decades, and it is expected to overtake lung cancer as the second biggest cause of cancer death by 2025. Unfortunately, PC is frequently detected at an advanced stage, with metastatic dissemination present at the time of diagnosis. Although surgical resection improves patient survival, only 15–20 percent of patients have surgically resectable tumours, and long-term survival is still dismal. Unfortunately, our most effective chemotherapy therapies only extend life by an average of 8–16 weeks, necessitating the development of more effective treatments.

The global COVID-19 pandemic has challenged health systems to rapidly adapt to dynamic and uncertain circumstances. Key emerging themes in pandemic 'hot-spot' areas have included resource shortages (both material and personnel) and patient overruns. Government and institutional responses have focused on population-health measures (such as social-distancing, promotion of hand hygiene) and health-system planning (such as redeployment training and treatment rationalisation), for oncology settings, the convergence of several unique features in this pandemic represents a complex problem [2]. These include the risk of adverse oncological outcomes owing to restricted ability to diagnose and treat malignancy, and the concern about iatrogenic exposure of a vulnerable population to the virus through hospital visits. Additionally, in cancer care, a step-wise triage system has been advocated, where non-curative treatments are withdrawn first [3]. The challenge of treating cancer during COVID-19 has been likened to a war, with potential moral hazards to cancer-care staff arising from decision-making around treatment restriction compared to those facing combatants in conflict zones.

Healthcare workers are a known at-risk population for COVID-19 infection due to exposure. In certain areas, high rates of absenteeism owing to sickness are reducing oncology service staff numbers. Moreover, increased interfaces from concerned patients and family owing to COVID-19-related queries threaten to overwhelm information providers such as those staffing telephone cancer support lines [4]. The challenge of providing ongoing high-quality cancer treatment is matched by difficulties in continuing psychosocial support for patients, carers and work colleagues alike.

The pace of change to diversify models of cancer care delivery during the COVID-19 pandemic has been swift. Like in other disasters, the adoption of telehealth solutions as part of social distancing measures has been widespread including in the oncology clinic. Clinician willingness, issues with reimbursement and healthcare service organisation have been previously raised as barriers to the use of telehealth. COVID-19 has prompted reimbursement and service infrastructure barriers to be overcome with clinicians and administrators obliged to rapidly upskill. Likewise, interruptions to clinical trials in the oncology space have required rapid responses from investigators, ethics committees and regulators. Interruptions to oncology clinical trials have limited cancer patients' access to emerging treatments, and ramifications of the pandemic have reverberated throughout academia. Concerns include interruption of research funding amongst a wider economic slowdown, social distancing requiring rationalisation of on-site research staff and ethics of exposing vulnerable advanced cancer patients to coronavirus.

The impact on frontline workers' psychosocial health from previous disasters has been documented, although evidence specific to oncology services is notably limited. However, lessons relevant to the current pandemic can be drawn from the previous SARS outbreak in 2003, reported in general hospital and palliative care settings. In Hong Kong, anxieties related to supplies of effective personal protective equipment, a feeling of reduced self-efficacy, and concern about contracting the disease and spreading it to family members. Perceived ambiguity of strategy and dissemination of information was noted, which was exacerbated by frequent changes to policies and restructuring of services. Similar experiences were reported in healthcare workers in a Toronto hospital. Here, the perceived sense of danger was heightened by intense media coverage. Workers who were deemed 'non-essential' felt isolated and ineffective, whilst those still working had burdensome workloads, as voluntary quarantine placed greater workload on the remaining staff. A further study from a palliative care service in Singapore identified adverse emotional responses including anger, frustration, powerlessness and fear amongst patients and staff. Patients and healthcare workers were confronted with difficult realities including having limited access to friends, families and healthcare professionals, having to weigh up risks and benefits of treatments, and facing death in isolation.

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