



Life of an Oncologist after COVID-19 Pandemic

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Coronavirus disease 2019 (COVID - 19) crisis led to a significant strain on oncological services with reallocation of resources towards Coronavirus infection. Assessment of the risk-benefit ratio and prioritization of cancer patients was necessary. In the absence of a vaccine, drug or presence of a herd immunity (as a result of disease transmission), it was a like a double-edged sword for cancer patients, where they had to choose between either an increasing risk of infection transmission or a delay in cancer treatment for mitigation of Coronavirus infection. Academic activities, trainings, examinations (theoretical/practical) and all research activities were put on hold. Timely delivery of surgery, radiotherapy or chemotherapy was delayed even for patients with curative cancer. Current pandemic offered an opportunity towards increasing the awareness and adoption of virtual technological innovations to interact and educate, formulate clinical guidelines, researching newer modalities and drugs and promoting a great sense of mutual understanding and collaboration among healthcare workers all over the globe.

Introduction

Coronavirus disease 2019 (COVID-19) crisis has had a significant impact on cancer care services and brought the whole world to a standstill. Reallocation of resources, finances, and healthcare workers towards coronavirus infection - led to a strain on an already overburdened oncological workforce. Oncological societies all over the world formulated their own respective clinical guidelines for the managing cancer patients while simultaneously following principles of social distancing and taking precautions to prevent viral spread to flatten the transmission curve. Patient prioritization or triage was the main principle depending upon their age, co-morbidities, disease status etc. Multi-specialty tumor boards meetings were held to analyze the risk/benefit ratio for each patient and management planned accordingly keep in mind the principle of 'Primum non nocere' meaning 'First, do no harm'. At present, although the lockdown may have eased out and the pace of viral spread slowed down among the developed world, the struggle continues in many of the developing and underdeveloped nations. It is gradually becoming evident that COVID-19 associated apprehensions/concerns are bound to stay till development of a novel vaccine and presence of herd immunity is established [1]; Chandra and Thomas, 2020). Nevertheless, a new reality awaits us all, where we need to learn to live with this infection, ponder upon the lessons learned from this ordeal, rethink our current needs and plan accordingly for the future.

We must appreciate the overwhelming sacrifice and volunteerism of COVID warriors many of whom were trained oncologists during this time of crisis. At the peak of infection caused by this invisible enemy, with no cure or vaccination in sight, healthcare staff showed admirable courage and responsibility by their presence at work, despite knowing the great risk they posed to themselves and their families. High rates of burnout were witnessed in healthcare workers especially in COVID hospitals [2]. Social distancing and use of personal protective kit was the new normal. Care of the cancer patients was the priority for all oncologists. Technological innovation formed the basis of

patient management in form of virtual tumor boards, online consultations, and data/research collaborations on COVID-19 infection. It is this combined spirit of selfless service to the patient population, cooperation and technical prowess displayed that constituted the finest hour of our oncology field.

However, everything was not as easy as it seems to begin with. There were various challenges on all fronts including staggered staffing, withholding treatments for curable cancer patients, oncology trainees sent to the forefront to fight what seemed an unwinnable battle, clinical trials put on hold, cancellation or postponement of clinical meetings etc were some of the challenges encountered by the oncology teams all over the world. Virtual online consultations led us to physically distance ourselves from our patients and recommending treatment based on reports without examination. Travel to a cancer centre was a herculean task, even if few of the cancer hospitals were functioning with limited staff and resources. As many of the surgeries, chemotherapy and radiotherapy procedures were delayed or postponed, a golden opportunity of treating cancer patients at an early stage seemed to be lost due to this pandemic. It was a nightmarish situation for cancer patients as they faced simultaneous challenge from twin enemies - COVID-19 infection and risk of missing the boat due to uncertainty surrounding their treatment. Patients and oncologists faced a difficult choice of either postponing or continuing treatment keeping in mind the coronavirus infection risk. For many patients with an uneducated background, nothing could be worse than delay in cancer treatment. An increase of 20% cancer related mortality is expected in the next 12 months that can be attributed to this pandemic [1]. These challenges and exceptional ways of confronting them made us realize the true relevance of all the people and things that are most dear to us during this hour of crisis and make us better prepare for future adverse events. We hereby, discuss what changes await us as we return to our normal routine in respective oncological departments during this time of crisis.

Hospital Preparedness and Planning

COVID-19 infection is here to stay and we need to live with it atleast till some vaccination is developed. All precautions including physical distancing, use of masks and hand washing to be followed by all doctors, trainees, patients and nurses. A COVID-19 panel setup previously during the peak of infection should continue functioning and meeting regularly to assess the situation in order to take rapid action as and when required. All asymptomatic or symptomatic patients being considered for surgery, chemotherapy or radiotherapy should undergo precautionary testing before any procedure or treatment [3-4]. A robust staffing schedule/plan needs to be in place for all oncological services. This plan or strategy should be implemented depending upon the number of staff/patient under quarantine or suffering from illness. A similar 3 tiered approach (Green/Yellow/Red operation levels) has been suggested by Chandra and Thomas (2020) based upon the institutional/local set-off factors and disease burden among the patients and staff to deal with such a scenario in the department [5]. In addition, clinical management guidelines for various carcinomas to be strictly adhered to and risk-benefit ratio to be taken into consideration before taking any decision. A separate COVID-19 ward and unit has been established dedicated to COVID patients only.

Forthcoming Prospects for Oncological Services

Telemedicine or virtual platforms were established in response to the pandemic to minimize direct physical contact between individuals. These platforms are useful for patient consultations, conferences, official meetings; however, in the long run they may not be successful as it is impossible to replace direct patient interaction and clinical examination which forms the core of a doctor-patient relationship and quality patient care. Many of our cancer patients suffer from advanced stage disease, have limited functional mobility as a result of a poor performance status,



suffer from additional co-morbidities and some even have transportation difficulties also. This virtual platform may provide a ray of hope for patients who are already overburdened by demands of cancer care. Future follow ups, medical consultations and hospice or palliative care advice for patients living at far-off places and may be carried out using this remote virtual platform. It will provide a unique opportunity for all oncologist/hospitals to spread the message of cancer prevention and treatment, highlight the role of oncologist and may be widen their catchment area for patients. In addition to caring for patients, consultations and conferences, a realization of sort came up that many of the technical/radiation oncology support staff need not always be present physically in the hospital and may provide their expert services remotely from home. It may be possible to deliver safe and accurate radiotherapy remotely in high volume and satellite centers, thereby reducing the utilization of hospital resources and space. This fact may allow for work force redistribution in the hospital.

COVID pandemic led to extensive interruption of the professional training and medical education. Re-deployment of instructors/teachers towards clinical care and quarantine added to the chaos. There were reported delays in graduate/postgraduate exams and academic events (Conferences/Symposiums/Fellowships) for the trainees and clinicians. This last minute postponement led to wastage of resources and financial loss for hospital, sponsors and academicians or trainees thereby culminating into a source of additional frustration. Transformative approach to medical education seems unavoidable at present. Trainees and teachers in various medical institutions are already engaged with the recent changes introduced and are attempting to incorporate them for their career development. The question that now arises is as to whether there is a role of virtual examination and educational meetings. Medical fraternity has been stressing upon the value of face to face interaction, real time feedbacks and collaborative/didactic experiences that are hard to learn through online forums. These virtual meetings may provide a sense of social gathering especially for individuals left out due to one or the other reason. Many of the trainees often spend a large chunk of their hard earned money to visit and attend domestic or international academic training or clinical attachments far away from their native institutes. Chandra and Thomas (2020) shared their experience regarding virtual training that reduces the additional cost and may provide necessary hands on experience as far as radiotherapy contouring, plan evaluation, presentation are concerned. In the near future, many patients may benefit from the seemingly impossible task of remotely performing robotic surgeries from a far of place [5]. Though medical institutions and colleges across the globe have rapidly scaled up provisions for online courses, presentations and educational content; these training platforms cannot replace in-person classes, but may offer an alternative mode of education. At present, though substitution with online equivalents seems necessary, but it will be a challenge to replicate the clinical encounters of day to day clinics. These technological advancements were mainly driven by the need and urgency to put into place a feasible and practical solution in response to the pandemic. Efforts should be made by policy makers and teachers across the educational continuum to carefully analyze the current situation and make appropriate decisions regarding the future. Current pandemic offered everyone the opportunity towards increasing awareness and adoption of virtual technological innovations to interact and educate, formulate clinical guidelines, researching newer modalities and drugs and showed a great sense of mutual understanding and collaboration among healthcare workers [6-8].

Last few months have seen development of rapidly evolving clinical management guidelines for various cancer sites. Surgeries and chemotherapies were deferred, altered radiation fractionation schedules recommended, hormonal therapies used in some cases. Overall, we have seen everything from selective delay to omission of standard treatment modalities. Patient prioritization and risk/benefit ratio was the key. But with return towards pre-COVID way of living and normalization of the risk/ benefit ratio, attempts should be made to implement the standard considerations as far as possible. Innovative ways of treating patient like use of hypo-fractionated/ ultra-fractionated schedules etc. for various disease sites should be further evaluated and reported in a trial setting, rather than letting them going back in oblivion. Clinicians should attempt to think outside the box and adapt to the current situation. Technological innovation, collaboration, research dedication,



persistence and adaptability are the need of hour in the face of ever increasing challenges.

COVID -19 pandemic has led to heavy financial and academic losses for all of the oncological community. Collaborative efforts and spirit of camaraderie between all the specialties including surgical oncology, radiotherapy, medical oncology, preventive oncology, research and pathology is necessary to provide the best possible cancer care service just as we recalibrate to the new normal.

In conclusion, COVID-19 period was a time of unforeseen crisis and uncertainty that led us to innovate and develop facilities and frameworks suitable to deal with the challenge posed by this invisible enemy. The feeling of teamwork and cooperation along with acceptance of technological innovations will provide us with the determination and strength to keep on moving forward into the future with hope.

Acknowledgments

Nil

Disclaimer

None

Financial Support

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Conflict of interest statement

Nil

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