GLOBAL COALITION FOR RADIOTHERAPY

Initiation of The Global Coalition for Radiotherapy during the 2019 Novel Coronavirus Disease (COVID-19) Pandemic

Radiotherapy professionals, collaborating with industry and professional society partners are working together to try and ensure that all patients worldwide have access to the best radiotherapy for their cancer.

The COVID-19 pandemic has led to some unique challenges for this critical service which must find a way to continue and develop and indeed be used more during this crisis to ensure that the number of avoidable deaths during this time are minimized.

Response to COVID-19

Radiotherapy is often overshadowed by novel cancer drugs and newer treatments, despite being needed in 50% of cancer patients and involved in 40% of cancer cures. As the COVID-19 pandemic is causing worldwide chaos, radiotherapy is being relied on more than ever with surgery and chemotherapy being cancelled. Whilst the focus of Governments around the world is to ensure that intensive care capacity is not exceeded, we fear that cancer patients could become victims of avoidable morbidity and mortality if the issues they are faced with are not addressed soon. The Global Coalition for Radiotherapy is playing their part in finding short- and long-term solutions for the cancer patients during this Covid-19 emergency and beyond.

The ongoing COVID-19 pandemic is a dramatic challenge to healthcare systems around the world. Intensive care units are expected to be stretched beyond capacity and so redeployments of professionals, cancellations of non-vital treatments and expansion of intensive care is being used to combat the challenge.

The global coalition for radiotherapy was formed in response to the concern that whilst healthcare is rightly concentrating their efforts on the pandemic, the tragedy is that some cancer patients' lives will be lost, who had this pandemic not occurred, would have survived.

The impact to cancer patients is a downstream consequence that will persist even after the peak of the virus. Inevitable delays in diagnosis will result in stage migration; delayed and interrupted treatment plans will not only affect patients today, but the cumulative backlog will snowball and impose a strain on cancer services following this pandemic. There is hence an urgency for solutions to be initiated soon to mitigate these issues.

Radiotherapy is now more crucial than ever. Based on the gathering of sentiments among the oncology community, radiotherapy has emerged as the "go-to" treatment option, as surgery and chemotherapy are being postponed, for fear of the risk of virus transmission via aerosolised virions and subjecting immunocompromised patients to COVID-19. Years of underinvestment, globally, means that radiotherapy centres that were barely coping before the crisis and are now faced with a much more daunting challenge.

The Global Coalition for Radiotherapy is thus using its collective multidisciplinary voice to advocate for the best practice of radiotherapy for patients in these challenging times and in the future. We aim to leverage the existing work by all the organisations through dissemination of data, research, policies and recommend best practices based on experience from all over the world.

The strength of the coalition is its broad membership, which includes medical professionals, advocacy groups, international societies and industry which together will enable solutions to be discussed or found from experience within the group. Information can be rapidly disseminated, and solutions implemented more easily as everyone has access to the same information and understanding and everyone engaged in a transparent manner. The coalition will also work on policies that are focused on what is needed for radiotherapy now, and in the future looking through this pandemic.

The first global meeting for radiotherapy was held on the 8th April 2020. It was very well attended with 41 professionals from across the world joining digitally. Discussions primarily focused on seeking advice and sharing of invaluable experiences by societies and institutions that were affected by the COVID-19 outbreak at all levels. Short- and long-term solutions for radiotherapy were discussed, as well as the importance of this group going forward.

Professor Chua and Professor Xie spoke in detail about their experience at the Department of Chemotherapy and Radiotherapy, Zhongnan Hospital of Wuhan University from Wuhan city, China. This was a quickly forged collaboration between two tertiary cancer centres from Wuhan city and Singapore, given the recognition for rapid research and data-sharing at the early stages of the COVID-19 pandemic. The impact of Covid-19 on cancer patients and treatment plans was addressed very early in the crisis and plans implemented so that as many patients as possible could receive treatment. They talked about their elaborate infection control protocol to screen patients and healthcare workers, which included setting up a fever clinic to screen suspect cases; twice-daily temperature screening and a buddy system for staff, etc. Overzealous disinfection routines became mandatory and the flow of patients and staff were strictly controlled by staggering appointment and staff rotating in teams.

The team have published the first of their preliminary findings¹ and have shown a possible association between the diagnosis of lung cancer and a higher risk of contracting the virus than other cancer types. In the meeting, the professors stressed the importance of data-sharing for the generation of important evidence to guide the formulation of treatment guidelines, as opposed to the observations that proposals have mostly being based on sentiments and biases of the individual physician. As a case in point, their research group was only able to extract information from 12 patients with concurrent diagnoses of cancer and COVID-19 from screening a pool of 1,524 medical records (which translates to a 0.79% incidence). A larger denominator is thus needed to aggregate more positive cases, so that new and robust insights can be gained.

On this note, we have laid out the immediate plans of The Global Coalition of Radiotherapy (TGCR). Speed of action and communication is of the essence.

Plans

- The website will upload COVID-19 radiotherapy links from around the word <u>daily</u>, so that information can be shared as soon as it becomes available and can be readily accessed in one place;
- A section for data sharing and collection has been formed so emerging data can be shared immediately;

- A section of research ideas will be created to share and link collaborators
- Industry partners can use this medium to share and focus their efforts on developing innovative solutions that are targeted to solving the needs of the physicians on the ground;
- Societies approaches to issues such as workforce management and reimbursement can be shared;
- The coalition will meet by zoom every 4 weeks to plan assess status and how radiotherapy could and should look in the medium and long term, so that international plans can be developed for radiotherapy access and priority as we go forward together.

Finally, the current public health crisis indeed represents an unprecedented moment in the human history that has not been witnessed in the past few decades. The stresses of such a crisis demands the unity of efforts across all fronts to tackle several healthcare- and non-healthcare-related issues that will be borne from this COVID-19 pandemic. TGCR is determined to represent such an effort to not just address the radiotherapy needs, but also the holistic care of all cancer patients who are affected by COVID-19.

The website can be found at: www.actionradiotherapy.org/global-coalition

Inquires can be made to:

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References

1. Yu J, Ouyang W, Chua MLK, Xie C. SARS-CoV-2 Transmission in Patients With Cancer at a Tertiary Care Hospital in Wuhan, China. JAMA Oncol. Published online March 25, 2020. doi:10.1001/jamaoncol.2020.0980