

View Points in Oncology: Guiding Cancer Care in Coronavirus Disease Pandemic

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Coronavirus outbreak has adversely affected the cancer care delivery system apart from affecting the overall health system worldwide. Cancer patients are more susceptible to acquire coronavirus infection and are at an increased risk to develop severe or critical form of COVID-19 [1]. Oncology communities are having a tough time deciding treatment modifications in cancer management in view of paucity of data on different aspects of cancer care. We have evolved from December 2019 till date with many scientific guidelines regarding management of cancer patients in a background of coronavirus outbreak. Different Institutions, Hospitals, Oncology societies have put in their efforts together to formulate guidelines to ensure cancer care delivery at cancer centres.

Practice of oncology is facing many hindrances as lockdown has made it difficult for patients to present to hospitals. Almost all guidelines have advocated to continue cancer treatment with an instruction to avoid unnecessary visits to hospitals to minimise the risk of infection [2]. Oncology is an emerging speciality where facts are changing very rapidly. Cancer, from being a deadly disease, has noted a significant increase in survival for many cancer types and that became a possibility with extensive research for all tumour types.

COVID-19 has affected cancer care delivery and cancer research. Oncology communities have moved from evidence based practices to consensus guidelines. Earlier, new practices were adopted on the basis of results of randomised controlled trials with adequate sample size, but this unprecedented situation has changed our oncology perspective. We need more time to understand the harms and benefits of new practices adopted in our day to day life. Published data on practice modification from different parts of the world is the biggest learning resource to boost our confidence.

Viewpoints have never been considered as a good level of evidence and are the topics we hear being debated in point-counter-points at meetings, are also the subjects of grand rounds presentations, and are the basis of decisions that sometimes give us sleepless night. It is often considered when the controversies in oncology and oncologic science need to be defined, discussed, and debated. As we are fighting a new battle every day with new battle fronts in cancer care delivery, several types of opinion pieces, including Editorials, Commentaries, Viewpoints, Correspondence, Short Communication and Special Report, have gained importance. Each of them is serving a separate purpose to make oncology communities informed for effective cancer care in this crisis.

Viewpoints are strong point of views that provokes the community to think and make a strong stand and question his or her own stand on current issues. In COVID times, viewpoints are helping to set an agenda for cancer care.

To understand the distribution of published manuscripts on management of different cancer types, a systematic literature search was performed using PubMed database using word Cancer, COVID-19 and coronavirus disease on 23rd June, 2020. Out of 734 articles reflected on search, 267 articles were found to be associated with cancer care amidst the current pandemic. All the articles were further analyzed to see the distribution of article types and country of publication to understand the contribution of worst affected countries to guide the rest of the world. We did not consider accepted articles in pre-proof for analysis.

In our analysis, only 14% articles were found to be original articles and were mostly from USA,

China and Italy (Table 1).

Publication summary as per type of manuscripts		
Type of Manuscripts	Total Number (267)	Percent (%)
Correspondence/Letter to Editor/Comment/Commentary/View Point/ Short Communication/Special Report	111	41.57
Review	53	19.85
Recommendations/Guidelines	35	13.10
Editorial	19	7.11
Case Reports	11	4.11
Case Series	02	0.74
Original Research	36	13.48
Publication summary as per Country of Origin		
Country of Publication	Total Number (267)	Percent (%)
USA	70	26.21
China	55	20.59
Italy	46	17.22
India	19	7.11
United Kingdom	12	4.49
France	11	4.11
Germany	08	2.99
Spain	06	2.24
Brazil, Canada and Switzerland	04 each country	1.49
UAE, Hong Kong and Lebanon	03 each country	1.12
Singapore, Netherland, Hungary and Turkey	02 each country	0.74
Prague, New Zealand, Belgium, Kuwait, Japan, Peru, Morocco, Sudan, Saudi Arabia, Iran and Philippines	01 each country	0.37

Table 1: Publication statistics on Cancer Care and COVID-19 (PubMed Indexed).

This reflects that 86% articles were either review, guidelines or recommendations, editorial, correspondence, comment, viewpoints, communications, case report and series, that guided our fight against COVID-19. This pandemic has united us to work together and collaborate irrespective of difference in our sociocultural parameters. More than 5% published data had authors from different nations, showing oncologists have started working across the geography to minimize the challenges and boost the learning from other experience. Out of 19 articles published from India, 2 articles were found to be original study. Maximum number of articles have been contributed by Tata Memorial Hospital, Mumbai. Personal experiences and change in practices at institution level was the only learning resource in this crisis. List of publications in reference to article types and publishing Institutions have been summarised in Table 2.

Institute Name	Journal Name	Article Type	Reference/ pdf Link
Tata Memorial Hospital, Mumbai	Head Neck	Comparative Study	[3] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7264597/pdf/HED-42-1173.pdf
	Head Neck	Review	[4] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7267519/pdf/HED-42-1144.pdf
	Indian Journal of Cancer	Special Article	[5] http://www.indianjancer.com/temp/Indian Journal of



			Cancer 572123-4941821_134338.pdf
	Journal of Laparoendoscopic & Advanced Surgical Techniques	Case Reports	[6] https://www.liebertpub.com/doi/pdf/10.1089/lap.2020.0241
	Indian Journal of Surgical Oncology	Review	[7] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7212248/pdf/13193_2020_Article_1086.pdf
	New England Journal of Medicine	Correspondence	[8] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7207224/pdf/NEJMc2011595.pdf
Lady Hardinge Medical College & SSK Hospital, Delhi	Asian Pacific Journal of CancerPrevention	Editorial	[1] http://journal.waocp.org/article_89005_932b137a4_11c9b5e8acfedda9acc5d5c.pdf
	Asian Pacific Journal of CancerPrevention	Editorial	[9] http://journal.waocp.org/article_89091_04d2c6b8ac96fe06ee79f6fe78b3a9dd.pdf
	Lung Cancer Management	Commentary	[2] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7202360/pdf/lmt-2020-0012.pdf
All India Institute of Medical Sciences, Delhi	Indian Journal of Cancer	Letter to Editor	[10] http://www.indianjcancer.com/temp/Indian Journal of Cancer572218-5014929_135549.pdf
	Indian Journal of Surgical Oncology	Case Reports	[11] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7201913/pdf/13193_2020_Article_1082.pdf
Post Graduate Institute of Medical Education and Research, Chandigarh	Medical Hypotheses	Hypotheses	[12] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7282763/pdf/main.pdf
Cancer Institute (WIA), Adyar, Chennai	Indian Journal of Surgical Oncology	Editorial	[13] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7188486/pdf/13193_2020_Article_1080.pdf
All India Institute of Medical Sciences, Rishikesh	Indian Journal of Cancer	Recommendations	[14] http://www.indianjcancer.com/temp/Indian Journal of Cancer 572129-4922227_134022.pdf
Tata Memorial Center, Kolkata	Journal of Global oncology	Observational Study	[15] https://pubmed.ncbi.nlm.nih.gov/32552110/
Mahamana Pandit Madan Mohan Malviya Cancer Centre, Varanasi	Indian Journal of Cancer	Perspective	[16] http://www.indianjcancer.com/temp/IndianJournal of Cancer 572221-4962881_134708.pdf
Max Healthcare, Delhi	ecancermedical Journal	Editorials	[17] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7289605/pdf/can-14-ed101.pdf
Manipal College of Dental Sciences, Mangalore, Karnataka	Oral Oncology	Letter to Editor	[18] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7151408/pdf/main.pdf
Kalka dental College & Hospital, Meerut, UP	Oral Oncology	Editorial	[19] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7211608/pdf/main.pdf

Table 2: Indian Publications on Cancer Care and COVID-19 as per Institution Affiliation (Source: PubMed till 23th June 2020).

Many centres have started original studies related to problems they have encountered during this pandemic and outcome of these studies, will certainly help us to modify our cancer care practices in the best interest of our patients. It will be an important task to critically analyse the new problems

associated with this crisis to optimise our cancer care facilities. Although this pandemic has made a major disruption in every aspects of cancer care, it does not necessarily mean that cancer care should come to a standstill. Oncologists are trying to overcome many challenges with personalized decision making and by implementing appropriate technological solutions.

This pandemic will probably end in coming times but learnings from this pandemic will certainly help us to formulate future interventions. This pandemic taught us to work in close collaborations, to learn from each other and to help each other to make our science and research useful to combat this crisis. This positive change will certainly help us to focus on more innovative methods to reach out to people like we did in this crisis i.e. patient consultation without meeting them face to face, knowledge update through webinars, patient educations through podcast. Viewpoints have helped us to make effective treatment decisions in view of limited evidence based data and motivated us to share our learning to rest of the world, to make our view points as a source of learning and important reference for cancer care.

References

References

1. Shankar Abhishek, Saini Deepak, Roy Shubham, Mosavi Jarrahi Alireza, Chakraborty Abhijit, Bharti Sachidanand Jee, Taghizadeh-Hesary Farzad. Cancer Care Delivery Challenges Amidst Coronavirus Disease - 19 (COVID-19) Outbreak: Specific Precautions for Cancer Patients and Cancer Care Providers to Prevent Spread. *Asian Pacific Journal of Cancer Prevention*. 2020; 21(3)[DOI](#)
2. Shankar Abhishek, Saini Deepak, Bhandari Ruchir, Bharati Sachidanand Jee, Kumar Sunil, Yadav Geetika, Durga Tarun, Goyal Nalin. Lung cancer management challenges amidst COVID-19 pandemic: hope lives here. *Lung Cancer Management*. 2020. [DOI](#)
3. Bhattacharjee Atanu, Patil Vijay M., Dikshit Rajesh, Prabhash Kumar, Singh Arjun, Chaturvedi Pankaj. Should we wait or not? The preferable option for patients with stage IV oral cancer in COVID -19 pandemic. *Head & Neck*. 2020; 42(6)[DOI](#)
4. Singh Arjun Gurmeet, Deodhar Jayita, Chaturvedi Pankaj. Navigating the impact of COVID -19 on palliative care for head and neck cancer. *Head & Neck*. 2020; 42(6)[DOI](#)
5. The COVID-19 pandemic and the Tata Memorial Centre response. *Indian Journal of Cancer*. 2020; 0(0)[DOI](#)
6. Pawar Tushar, Pokharkar Ashish, Gori Jayesh, Pandey Diwakar, Rohila Jitender, Dsouza Ashwin, Saklani Avanish. The Technique and Justification for Minimally Invasive Surgery in COVID-19 Pandemic: Laparoscopic Anterior Resection for Near Obstructed Rectal Carcinoma. *Journal of Laparoendoscopic & Advanced Surgical Techniques*. 2020; 30(5)[DOI](#)
7. Shinde Rajesh S., Naik Mekhala D., Shinde Shital R., Bhandare Manish S., Chaudhari Vikram A., Shrikhande Shailesh V., Dcruz Anil K.. To Do or Not to Do?—A Review of Cancer Surgery Triage Guidelines in COVID-19 Pandemic. *Indian Journal of Surgical Oncology*. 2020; 11(2)[DOI](#)
8. Pramesh C.S., Badwe Rajendra A.. Cancer Management in India during Covid-19. *New England Journal of Medicine*. 2020; 382(20)[DOI](#)
9. Seth Tulika, Shankar Abhishek, Roy Shubham, Saini Deepak. Hemato- Oncology Care in COVID-19 Pandemic: Crisis within a Crisis. *Asian Pacific Journal of Cancer Prevention*. 2020; 21(5)[DOI](#)
10. Adhikari S, Gupta N, Sharma A, Deo S, Bhatnagar S. Caring of cancer patients during COVID-19: A real-life challenge. *Indian Journal of Cancer*. 2020; 57(2):218-220. Available from: URL: <http://www.indiancancer.com/article.asp?issn=0019-509X;year=2020;volume=57;issue=2;spage=218;epage=220;aulast=Adhikari>.
11. Deo S. V. S., Kumar Sunil, Kumar Naveen, Saikia Jyoutishman, Bhorawal Sandeep,

- Bhatnagar Sushma, Sharma Atul. Guiding Principles for Cancer Surgery during the COVID-19 Pandemic. *Indian Journal of Surgical Oncology*. 2020. [DOI](#)
12. Chauhan Anshika, Ghoshal Sushmita, Pal Arnab. Increased susceptibility of SARS-CoV2 infection on oral cancer patients; cause and effects: An hypothesis. *Medical Hypotheses*. 2020; 144[DOI](#)
 13. Krishnamurthy Arvind, Gopinath Kodaganur S.. The Need for Prioritizing Cancer Surgeries Amidst the COVID-19 Pandemic. *Indian Journal of Surgical Oncology*. 2020; 11(2)[DOI](#)
 14. Narain T, Gautam G, Seth A, Panwar V, Rawal S, Dhar P, et al. Uro-oncology in times of COVID-19: The available evidence and recommendations in the Indian scenario. *Indian Journal of Cancer*. 2020; 57(2):129-138.
 15. Ghosh Joydeep, Ganguly Sandip, Mondal Debapriya, Pandey Prashant, Dabkara Deepak, Biswas Bivas. Perspective of Oncology Patients During COVID-19 Pandemic: A Prospective Observational Study From India. *JCO Global Oncology*. 2020; 6[DOI](#)
 16. Mukherji A, Gupta T, Agarwal J. Time, distance, shielding and ALARA; drawing similarities between measures for radiation protection and Coronavirus disease pandemic response. *Indian Journal of Cancer*. 2020; 57(2):221-223.
 17. Sirohi Bhawna, Buckshee Rohatgi Tanya, Lambertini Matteo. Oncofertility and COVID-19—cancer does not wait. *ecancermedicalscience*. 2020; 14[DOI](#)
 18. Shetty Sameep S., Rao Vishal, Kudpaje Akshay, Mithra Surya, Merchant Yash, Shabadi Nikita. An oncologist perspective on COVID 19: A mysterious cryptic virus. *Oral Oncology*. 2020; 105[DOI](#)
 19. Kochhar Anuraj Singh, Bhasin Ritasha, Kochhar Gulsheen Kaur, Dadlani Himanshu. Provision of continuous dental care for oral oncology patients during & after COVID-19 pandemic. *Oral Oncology*. 2020; 106[DOI](#)