2020; 3(4): 431 - 434 . doi: 10.31488/bjcr.157

Research Article

Tele Oncology Consultation During the Covid-19 Pandemic: Single Center Analysis Kumanan J¹, P.Jovita.M.Daniel², Sowmica Devabhaktuni¹, Ravichandran Ambalathandi³, Manickavasagam

Meenakshisundaram⁴, Selvakumar⁵, Sathish Kumar⁶

- 1. Resident Medical Oncology, Department of Medical Oncology, SRMC, Chennai, Tamilnadu, India
- 2. Associate Professor Medical Oncology, Department of Medical Oncology, SRMC, Chennai, Tamilnadu, India
- 3. Professor medical Oncology, Department of Medical Oncology, SRMC, Chennai, Tamilnadu, India
- 4. Assistant Professor Medical Oncology, Department of Medical Oncology, SRMC, Chennai, Tamilnadu, India
- 5. Chairman Tele Medicine Department SRIHER, Chennai, Tamilnadu, India
- 6. Senior Engineer Telemedicine Department SRIHER, Chennai, Tamilnadu, India

*Corresponding author: Dr.P.Jovita .M.Martin Daniel, Associate Professor Medical Oncology, SRMC, SRIHER, Porur, Chennai-116, Tamilnadu, India Received: August 04, 2020; Accepted: August 11, 2020; Published: August 18, 2020

Abstract

Background: COVID-19 has posed a lot of changes in the medical management of various fields. With the advent of Tele Oncology to combat the lag in treatment for the cancer patients to keep their disease at bay, may eventually be a practice transforming style of management getting in order the line of care for the patients in need. Methods: This is a retrospective study in the Medical Oncology Department at Sri Ramachandra Institute of Higher Education and Research Center from March 23rd to September 30th, 2020. Data was collected from documented records of tele consultations, landline calls, mobile calls, SMS (short message service) and What's app consultations and emails. Results: There has been a definite reduction in the outpatient consultations in 2020 compared to 2019; however the number of tele-consultations through the different means has increased. Out of 746 consultations, 347 (46.5%) were through Tele consultations, 142 (19%) through what's app, followed by mobile calls 78(10.4%). Others were made through Landline calls 75 (10%), SMS 71 (9.5%) and Emails 33 (4.4%). Conclusion: Something that makes Tele-oncology interesting is that the physicians and the patients both are new to it. Like any new modality Telemedicine does face teething issues which can be overcome with proper systemization and incorporation of protocols. Hence, larger studies are needed to validate this modality as an integral part extension of health care services, in order to increase the standard of care.

Keywords: Tele Oncology Consultation, Oncology consultation in COVID19 situation

Introduction

The Novel strain of corona virus, SARS-CoV-2 or COVID-19 has posed a lot of challenges in the medical management of various fields [1]. Needless to say that there is a topsy-turvy in the perspective of clinical science. There is a change from ancient clinical management (where focus was on clinical examination) to tele-science management (where focus is based on avoiding personal contact and deriving the diagnosis based on investigations and reports shared remotely). Besides, governments in all countries has imposed stringent rules on confinement, thereby limiting all kinds of transportation. Hence, this has led to the complete reliance on telecommunications, ranging from online education, and work from home, to telemedicine. The medical fraternities across all countries have embraced this option as the safest, both for the patient and the medical workers [2]. This new panoramic view has led us to contemplate if telemedicine is a boon or bane. **Methods**

This is a retrospective observational study and data was collected from 23rd march 2020 to 30th September 2020 from the department of Medical Oncology, Sri Ramachandra Medical Higher Education and Research Center, Chennai. Data was collected from documented records of all tele-consultations done via the newly developed tele-consultation app (SRMC TELEAPP) by the institute; landline calls; mobile

calls; SMS and What's App consultations. Email consultations that were done via both the department's email and physician's personal email were taken into account. The outpatient (OP) consultation data and admission data for the same period of both 2019 and 2020 was also collected.

Results

A total of 746 consultations were made using various mod A total of 746 consultations were made using various modalities. Out of 746 consultations, 347 (46.5%) were through Tele consultations, 142 (19%) through what's app, followed by mobile calls 78 (10.4%). Others were made through Landline calls 75 (10%), SMS 71 (9.5%) and Emails 33 (4.4%). Majority of consultations were made during the months of April and May, 322 consultations (43.1%) when there was a strict implementation of transportation and e pass protocols (Table 1, Graph 1) When compared to 2019, the outpatients and inpatients decreased by half in 2020. A total of 1324 out patients was seen during the study period in 2020, whereas the number of OP consultations was 2683 for the same duration in 2019. Similarly, numbers of admissions during the study period were 522 whereas the numbers of admissions for the same period in 2019 were 1058 (Graph 2).

Discussion

Emphatically, patient care in all fields comes across as transformed in our clinical practice with the evolving telemedicine strategies and options available. The first challenge would be the education level and the level of understanding of the patients. The second challenge with telemedicine is the ease of access in any developing country. The third challenge will be the connectivity of the internet/intranet. The fourth challenge in the minds of conventional patients would be in the mind set of the patients denying remote health care facility with the preference to face to face contact even in pandemic situations. The fifth obstacle will be the difficulty in carrying out medical management without the antediluvian clinical examination, deliberately aware that clinical examinations by astute physicians can pick up cancers ahead of time [3].

In our study the tele-consultation was significantly more through the SRMC TELEAPP designed by the institute telemedicine department. Patients related better with video consultations than mere calls or emails. Through the tele-consultation methods patients could share the reports and discuss on further management in a timely manner. They could also make multiple calls to clarify doubts. Those with the need for an apparent urgent intervention got the access to the hospital care after COVID -19 test results (both for the patients and care taker).

The compelling hurdle one might face will be in the choice of patients who can visit hospital and those who can follow up

from home through telemedicine. The three subgroups of patients we off and on treat in Oncology are those with curative intent on intravenous chemotherapy/Biological agents; patients in the follow-up on oral therapy (oral metronomic/ hormonal agents/ small molecules) ; and metastatic cancer patients receiving palliative treatment. [4]. The European Society of Medical Oncology has formatted guidelines on patient care during the pandemic. In several sites of malignancy like Breast, colon, lung it was vividly advocated the switch to telemedicine as far as possible and to treat based on high-to-medium priority patients [5, 6].

These guidelines are imperative for practitioners, but a proper triage will go a long way in the patient management which will depend on the individual physician's expertise. Albeit, the confounding factors could obscure the correct interpretation through the remote tele-consultation, one cannot be oblivious about the blind spots the interpretation via tele consultation could pose without the antique clinical examination methodology [3]. It is also imperative to understand that a in the tele-consultations, a face to face meet or a video conference is better than SMS, Emails and Phone calls, both for patients and physicians on account of better perception and discernment. The other factor that determines consistency is the Wi-Fi /internet connectivity bandwidth [7].

Definitely tele-health does have a long history and the barriers it has faced has been considerable in areas such as Technology (Broadband connectivity and availability), Legal (Liability and Litigations), Financial (Grants funding, Reimbursements), Business strategy (not institutionalizing), Human resources (Views of patients, Understanding or Educational level or accessibility) [8].

It is essential for Health care workers to have equipoise on physical distancing with tele-health appropriate services integral part of health care facilities and not as a stand-alone project; undoubtedly, there will always be some medical emergencies or situations for which physical presence cannot be compromised. The clinical trials running in hospitals will be kept operating with the tele consults as well. More than ever before in the past pandemics, the COVID-19 pandemic is sure to have greater impacts on the operational style of all fields conspicuously in the Health care Industry with the evolution of new models of care such as tele-health [9, 10].

Ultimately, one has to bear in mind to address the psychological aspect of the patient addressing the patient's well-being, motivation and sense of security, especially in times of uncertainty such as the current pandemic period, taking into consideration the fact that the patient's will is of primary importance. The use of a European Society of Medical Oncology web support has also been formatted to intercept the psychological support issue which can alleviate the problem to a big extent [3,11].

There is a rising need for electronically maintained records and Healthcare IT departments. Eventually the number of platforms providing tele- health care will raise, so also the need for the patients to become technologically savvy. More so as the growing numbers of geriatric population who will no doubt be benefited and be open to telemedicine. Hence combating the deficiency of health care professionals becomes a prominent driver for imbibing telemedicine [8, 11].

With the advent of Tele Oncology to combat the lag in treatment for the cancer patients to keep their disease at bay, may eventually be a practice transforming style of management getting in order the line of care for the patients in need. At First, this has a greater impact on reducing the consumables via the personal protective equipment (PPE)[PPE consists of respirator N95 or FFP2 standard medical masks, gloves, gowns and eye protection by goggles or face shield] and the expenditures due to the same [3,12].

The second advantage would be the curtailing of long tiresome journeys and the forthwith retrenching expenditures go a long way in the patients' longstanding care. Not to mention the waiting periods in the clinics being abridged, avoiding opportunistic infections in the process of travel and consultations(plus the subsequent cost for the treatment of such infections), and the avoiding the squandering of time for the same. Tele consultations can be frequented much to the ease of the physician and the patient, rendering check of patients to the adherence of treatment, exchanging reports (prescription refills, lab requests, and checklists from physician). We could extrapolate its usage in establishing more primary health care facilitating centers with scheduled teleconferences communication and multidisciplinary tumor boards conducted with better liaison between specialists in far away centers in the management of patients in common [3, 12].

Nonetheless, the most important is the confidentiality of patient matters and pictures, as it becomes imperative and ethical to prevent divulging of details with the usage of encrypted text applications. However, tangibly teleoncology has taken precedence over its setbacks. The results obtained with the telehealth connectivity to rural health have been gratifying [13, 14].

Tangibly, the physicians found telemedicine cost effective and energy saving, with no associated increased workload, compared with face-to-face appointments. The physicians also indicated that the lack of physical examination did not really affect care provision when using telemedicine in majority of the cases [7,13,14].

There has also been a sizable increase in Tele consultation via, emails, videoconferences, What's App calls and texts, text messaging system and sharing of investigation reports through the same. These forms of consultations in the yester years were forbidden, as evaluation of patients in remote without seeing patients and examining them was not accepted as the right method of consultations. Nevertheless in situations such as a COVID 19 pandemic, we step out of our self imposed yester year's rules and give in to remote consultations. This compromise has turned out to be a boon than a bane by averting unnecessary patients' travels and avoiding face time in person preventing infection spread. Whence, even though our outpatients and inpatients in our department declined in number of patients there was an increase in the online consultations alleviating patients suffering and allaying their fear by the prescription of oral drugs whenever and wherever possible [15].

Conclusion

Notwithstanding the fact that COVID-19 and the mortality associated with it, need to be controlled primarily; all the same gives us a formidable opportunity to have Oncology care with the leisure of home care without travelling through teleconsultation in most of the patients barring those who are in need of interventions, overcoming time obstacles. Exploring this arena of care through the imposed acquisition of tele oncology consultations during the pandemic of COVID-19, alongside of the scrutiny of the hitches and unseen stumbling blocks will help us cut economic burden in the future.

Acknowledgement

We acknowledge the Medical Records team, staff nurses, the Telemedicine Department of SRIHER Mr.Koventhan, the administration (Mrs.Francina Mala) and reception team (Mrs.Nalini and Ms.Deepika) for all the efforts and contribution.

Conflicts of Interest

NIL

References

- Liang W, Guan W, Chen R, et al. Cancer patients in SARS-CoV-2 infection: a nationwide analysis in China. Lancet Oncol. 2020;21(3), 335–337.
- PubMed NCBI Managing cancer care during the COVID-19 pandemic: agility and collaboration toward a common goal. 2020.
- Elkaddoum R, Gh Haddad F, Eid R, et al. Telemedicine for cancer patients during COVID-19 pandemic: between threats and opportunities. Future Oncol. Editorial.
- Bitar N, Kattan J, Kourie HR, et al. The Lebanese Society of Medical Oncology (LSMO) statement on the care of patients with cancer during the COVID-19 pandemic. Future Oncol. 2020; 16(11), 615–617.
- ESMO. Cancer patient management during the COVID-19 pandemic. 2020. www.esmo.org/guidelines/cancer-patientmanagement-during-the-covid-19-pandemic

- ESMO. ESMO management and treatment adapted recommendations in the COVID-19 era: breast cancer. 2020. www.esmo.org/gui delines/cancer-patient-management-duringthe-covid-19-pandemic/breast-cancer-in-the-covid-19-era
- Smrke A, Younger E, Wilson R, et al. Telemedicine During the COVID-19 Pandemic: Impact on Care for Rare Cancers. JCO Global Oncol. 2020; 6:1046-105.
- LeRouge C, Garfield MJ. Crossing the Telemedicine Chasm: Have the U.S. Barriers to Widespread Adoption of Telemedicine Been Significantly Reduced? International Journal of Evironmental Research and Public Health. Int J Environ Res Public Health. 2013; 10: 6472-6484
- MD Anderson Cancer Center COVID-19 virtual visits. (2020). www.mdanderson.org/patients-family/becoming-ourpatient/planning -for-care/coronavirus-protections/covid-19virtual-visits.html
- Royce TJ, Hanna KS. Telemedicine for Cancer Care in the Time of COVID-19. JAMA Oncol. 2020; 6: 11.

- ESMO. COVID-19: supporting oncology professionals (2020). www.esmo.org/covid-19-and-cancer/supporting-oncologyprofessionals
- WHO. Rational use of personal protective equipmentfor coronavirus disease 2019 (COVID-19). (2020). https://apps.who.int/iris/bitstream/handle/10665/331215/WHO-2019-nCov-IPCPPE use-2020.1-eng.pdf
- Sirintrapun SJ, Lopez AM. Telemedicine in cancer care. Am Soc Clin Oncol Educ Book.2018; (38): 540–545.
- Sabesan S, Simcox K, Marr I. Medical oncology clinics through videoconferencing: an acceptable telehealth model for rural patients and health workers. Intern Med J. 2012; 42(7): 780–785.
- 15. Park ER, Chiles C, Cinciripini PM, et al. Toll, and On behalf of the Smoking Cessation. At Lung Examination (SCALE) Research Group Impact of the COVID-19 Pandemic on Telehealth Research in Cancer Prevention and Care: A Call to Sustain Telehealth. Advances Cancer. 2020; Wiley Online Library.

© Jovita MD, et al. 2020.

To cite this article: Kumanan J, Jovita MD, Sowmica.D et al. Tele Oncology Consultation During the Covid-19 Pandemic: Single Center Analysis. 2020; 3:4.