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Self-Cancer Care Management in Adults During COVID-19 Pandemic: A Literature Review

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ABSTRACT

Introduction: The coronavirus disease of 2019 (COVID-19) is a particularly hazardous virus due to its rapid transmission. The spread of COVID-19 is so rapid that the WHO has labeled it a pandemic, and Indonesia has declared it a national catastrophe. The purpose of this essay was to summarize the management of cancer patient care during the COVID-19 epidemic.

Methods: In this review, we used the PRISMA method and article sources from databases, including Scopus, Science Direct, SAGE, and CINAHL/EBSCO, from the years 2019 to 2020.. Inclusion criteria include research conducted in human, using nursing management strategies in cancer patients, and article written in English and have been published in 2020. Exclusion criteria include research on non-human, articles that did not mention cancer care management during the COVID-19 epidemic, review and survey studies.

Result: This review looked at 14 articles from different nations. Two studies used phone massage as an intervention, three studies used a combination of phone massage and phone call with smartphone technology, five studies used a video call to monitor cancer care management, one study used email or social media to monitor cancer care management, and three studies used web applications that are connected to the internet.

Conclusion: In conclusion, our findings suggest that continuing anticancer treatment during the COVID-19 pandemic is safe and possible if appropriate and stringent infection control measures are implemented. In the future, more extensive research of COVID-19 infection in cancer patients may aid in the care of oncology patients.

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1. INTRODUCTION

The Coronavirus disease 2019 is a very dangerous virus because it is transmitted very quickly. The transmission is so fast that WHO has declared the COVID-19 case a pandemic and in Indonesia it has been designated a national disaster, namely the Spread of Non-Natural Disaster Virus Infection (Xuan Tran et al., 2020) . The determination of the spread of this virus as a disaster is regulated in Presidential Regulation No. 12/2020. The World Health Organization (WHO) considers that the Coronavirus disease 2019 (COVID-19) is the most severe and serious health emergency facing the world so far. The COVID-19 case is a pandemic that occurs in almost all countries and is not focused on just one area (Yahia, 2020). According to WHO there are other global health emergencies such as Ebola, Zika, polio, and swine flu, but the incidence is very far from COVID-19 which until November 2020 has reached more than 50 million spread throughout the country and caused many deaths (Desson et al., 2020).

Coronavirus 2019 has the ability to spread faster than other corona viruses, according to the results of the latest study research, the protein contained in the SARS-CoV-2 corona virus has a special area or ridge that is denser. This makes it easier for them to attach to human cells than other types of coronavirus(Bin Traiki et al., 2020). When the virus easily attaches to human cells, this allows the SARS-CoV-2 corona virus

to have a better infectious ability and be able to spread more quickly. Health workers and paramedics who provide care and interact continuously with COVID-19 must pay attention to this. Personal protective equipment must be complete and standardized so that the risk of transmission is not accelerated. Health workers are at the forefront of handling positive patients infected with the COVID-19 virus, making them a group that is very vulnerable to infection. This is evidenced by the number of health workers in the world who have contracted COVID-19 from the patients they treat. The risk of exposure is very high when admitted to the patient directly, namely in the emergency room (Park et al., 2020).

The number of COVID-19 cases is still very high, from the first confirmed cases at the end of 2019 to the end of 2020, COVID-19 cases have reached more than 50 million cases, the total death toll is more than 700 thousand deaths. The number of health workers in the world who are exposed is reported to be more than 500 thousand, while the unreported is still very large(Hou et al., 2020) . Patients with cancer are at an increased risk of severe COVID-19 explains the prevalence of cancer that occurs and accompanying COVID-19 in China. In a study of more than 1,500 patients, it was found that 18 patients (1.1%) had comorbid cancer. In COVID-19 patients with comorbid cancer, symptoms were found to be more severe when compared to non-cancer COVID-19 patients (Munusamy et al., 2020). In another retrospective analysis, Lord et al., (2020) identified that out of 1524 COVID-19 patients, 12 patients were found with comorbid cancer (0.79%). This is higher than the cumulative incidence of all diagnosed COVID-19 cases reported in the city of Wuhan during the same time period (0.37%; 41152 of 11,081,000 cases). A study from Italy showed that among 355 patients hospitalized for COVID-19, around 20.3% of patients had active cancer (Ojeahere et al., 2020). To address the severity of symptoms complained of in COVID-19 patients with comorbid cancer, Montrief et al., (2020) studied the results of 105 cancer patients with COVID-19 compared to 536 controls who matched COVID-19.

It was found that patients with cancer had a higher risk of all severe outcomes, and patients with hematologic malignancy. Among all types of cancer is found lung cancer which has the most severe symptoms(Xuan Tran et al., 2020). A research study with a cohort design consisting of 928 patients from COVID-19 and the Cancer Consortium (CCC19) identified that age, smoking status, male sex, Eastern Cooperative Oncology Group (ECOG) performance status, and the presence of comorbidities were risk factors. independent to increase the more severe complaints that occur in COVID-19 patients (Ojeahere et al., 2020).

Despite advances in understanding of COVID-19 and cancer, the frequency of hospital-acquired infections in populations at high risk for this severe disease remains unknown. Research conducted in Wuhan showed a nosocomial transmission rate of

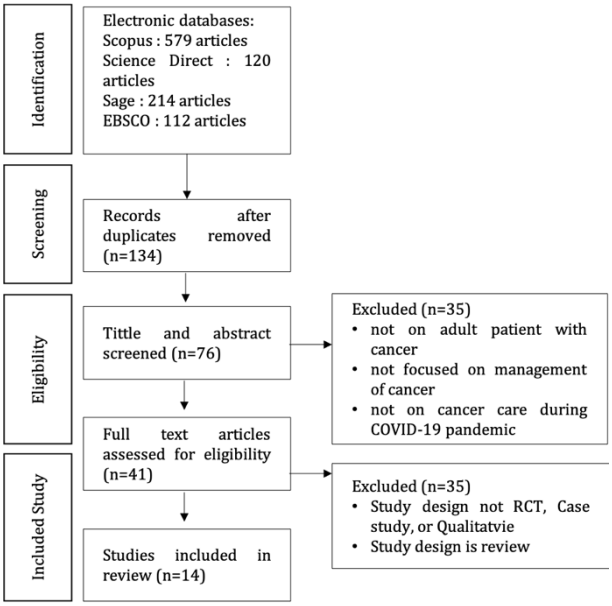

Figure 1. Article selection process adapted from PRISMA flowchart

COVID-19 of 7.1% among 918 patients with COVID-19 (Hou et al., 2020), while a study from the UK found a rate of 20% (Yahia, 2020). This alarming rate occurs in the absence of targeted infection control and prevention (ICP) measures (Desson et al., 2020). Because of this report, as well as the high level of contact that patients with cancer have with the health care system (eg frequent blood tests, treatment and hospitalization for treatment-related complications), the cancer center quickly introduced ICP measures to limit exposure to these patients. to become COVID19. Research that explains the management of care for cancer patients during the COVID-19 pandemic in order to avoid nosocomial COVID-19 infection and create a sense of security and comfort in patients has been carried out in several developed countries. Therefore, it is necessary to have a comprehensive systematic summary to know the management of care for cancer patients during the COVID-19 pandemic.

2. METHOD

Search method in this liyterature review includes original journals discussing care management in cancer patients during the COVID-19 pandemic. A literature search was carried out using several major databases such as Scopus, Proquest, Science Direct, Ebsco by entering the keywords “cancer care” and “covid-19 pandemic”. No other limitations are used to maximize literature search. The search results on the Scopus database include 579 journals, Since Direct includes 120 journals, Sage Included 214 Journals and Ebsco journals 112 journals.

The inclusion criteria for this literature search include research particles that use human research samples, research articles that use nursing management interventions in cancer cases, research journals that are in English and have been published in 2020. While the exclusion criteria in this literature search are research studies with samples not humans, did not discuss cancer care management during the

Covid-19 pandemic, research articles in the form of review and survey studies, and journals published in unknown databases. All journals used must be published in reputable journals in English. Of the total 905 research journals, there were 14 journals that met the inclusion criteria of researchers and were used as material for reviews.

3. RESULT

The General Features and Type of Study

A total of 1025 articles were retrieved from the initial search. Records after duplicates removed are 134 articles. Tittle and abstract screened make it become 76 articles. Authors excluded the articles which do not include adult cancer patient, do not focus on therapy management of cancer, and not on cancer care during pandemic. Full text articles assessed for eligibility and excluded study design that not RCT, Case study, or Qualitatvie. Fourteen articles then included in the study.

The Intervention

Overall, 14 studies show that the use of telemedicine is effective in improving monitoring patients with cancer disease during Covid-19 Pandemic. The majority of research studies (2 of 14) using phone massage as an intrervention, 3 research using a combination of phone massage and phone call with using the smartphone technology, 5 articles using a video call to cancer care management to monitoring, 1 studies to monitoring using email or social media, as well as three studies using web applications that are connected to the internet.

Most studies using intervention in the form of video call indicating good result related cancer care management during covid-19 pandemic. In addition the intervention used involves a combination of modalities, such as the existence of web-based applications, where it is found monitoring result (Alyssa et al,. 2020). If the patient coming to the hospital this placed to keep a distance of at least two meter during treatment. That health care team separate cyclic (move to base) to reduce risk of infection. For patients who are not receive active therapy, routine follow-up visits are minimized or postponed, and medical care is provided by telemedicine (Grazioli et al,.2020).

The advantages that can be observed in the intervention by using smartphone applications that are related interesting features. The smartphone app has the potential to address the complexity of disobedient behavior as well as lifestyle, with respect to comprehensive features, unique and interesting (Williams et al,. 2020).

Cancer in Covid Era

Outcomes of COVID-19 high-quality sufferers had been good, with best one determined loss of life because of development of superior metastatic disorder. Conclusion Our records imply that continuation of anticancer remedy in epidemic regions at some stage in the COVID-19 pandemic appears to be secure and feasible, if good enough and strict preventive. Patients with most cancers and COVID-19 had been much more likely to become worse into excessive infection than the ones without most cancers. The danger elements diagnosed right here can be useful for early scientific surveillance of disorder development in sufferers with most cancers who gift with COVID-19.

Patients with most cancers and COVID-19 had been much more likely to become worse into intense contamination than the ones without most cancers. The hazard elements diagnosed right here will be useful for early scientific surveillance of sickness development in sufferers with most cancers who gift with COVID-19. Older male sufferers are at a better threat of demise with COVID-19. Patients with most cancers also are at a better threat, as are the ones who've recently acquired chemotherapy. We offer well-founded estimates to permit sufferers and clinicians to higher stability those dangers and illustrate the broader impact.

Most of look at stated that hospital-received COVID-19, age, Eastern Cooperative Oncology Group fame and advanced degree of most cancers had been independently related to death.

4. DISCUSSION

Pandemic of COVID-19 that has swept the world since November 2019 until this day already to change much of the health infrastructure and manpower for divert towards containment and treatment of this illness. As a consequence, routine care of non-COVID illnesses has been severely disrupted, icluding cancer. Being an unprecedented situation, the recommendations for cancer care over the last few months have been continuously evolving. The majority of associations and guidelines recommend clinical triage of patients based on various disease subsites or biology.

The stand-alone cancer care were faced with a bigger dilemma. Cancer care in general and specifically cancer surgery, while being “elective” treatment most of the time, is often essential and cannot be postponed indefinitely. Delay in optimal treatment has been shown to adversely affect the outcome, making timely intervention critical. However, many literature brought to the forefront evidence that patients with cancer were observed to have a higher risk of severe events, intensive care, or death, compared with patients without cancer. Given this information, oncologists were faced with the clinical dilemma of whether to “treat or not to treat.” By not delaying treatment, there was a possibility of increasing short-term deaths due to the immediate threat of COVID-19. In face of the COVID-19 pandemic, research is urgently needed to guide the nursing care and more attention for susceptible populations. Here, by integrating clinical data from three databased, we try to found that how cancer management in adult during covid-19.

COVID-19 is characterised by rapid human to human transmission and currently there are no

therapeutics or vaccines available.Consequently, strict infection control measures are of paramount importance. Because of the immunosuppressive state, patients with cancer undergoing anticancer treatment such as chemoimmunotherapy or targeted therapy are often more susceptible to infections compared with individuals without cancer. In addition, patients with cancer combine a frequent burden of comorbidities and many patients are repeatedly treated in the same area like chemotherapy rooms. Fong et al (2020) have the recommendation for cancer management during COVID-19 pandemic, All basically encouraged patients to continue treatment, provided that all infection control and prevention measures were followed. Interruption of active treatment was observed in only if patient have sign and symptom like cough, anosmia and other typical symptom covid-19. In their study, they could not identify some evidence regarding patients with a specific histology, therapy, or subpopulation of patients with cancer to be at higher risk of severe illness from COVID-19 infection.

Other findings in a study by Elkrief et al (2020), a higher risk of developing severe events in COVID-19 disease in patients with cancer was reported. The authors suggest an intentional postponing of adjuvant chemotherapy or elective surgery for stable cancer. Only recently, they reported clinical outcomes from 28 COVID-19 infected cancer patients with solid tumours. In their retrospective study, COVID-19 infected cancer patients presented poor outcomes, with high occurrence of clinical severe event and a mortality rate of 28.6%. The largest study to date show negative prognostic factors associated COVID-19 severity in the cancer population. This study of 928 patients identified that age, male sex, smoking status, performance status and presence of comorbidities were independent risk factors for severe COVID-19. Our study not only re-identified these negative risk factors (i.e. age, poor bodystatus, advanced stage of cancer), but also identified hospital acquisition of COVID-19 as being an independent, negative factor. This novel finding clearly needs to be confirmed in other cancer centres, but identifies a patient-extrinsic factor to be considered in the fight against COVID-19. Our study reinforces the importance of strategizing and further study of infection control to prevent transmission of COVID-19 to hospitalised patients. For example, screening staff members and patients either for symptoms of COVID-19 or COVID-19 infection before entry in COVID-free units could be a potential method, as is suggested by several guidelines. Designating COVID-free units and personnel including pharmacists, physicians, nurses and other house-staff also recommended by healthcare authorities. Adequate personal protective equipment and strict hand-hygiene protocols are also of utmost importance for decreasing nosocomial infection.

Modifications needed in the current situation to provide palliative care, first : screening for cancer patient. Separate entrance for cancer patients should be made cancer patients should be screened and specific questions related to symptoms of COVID-19 should be asked. History of fever cough, cold, diarrhea, and whether living in a containment zone should be asked. The temperature should be checked by a noncontact, infrared thermometer. Second : communication skills. Before you start the conversation, tell the patient that you are going to wear a mask and protective glasses for the safety of both. Good communication involves verbal and nonverbal communication. The present situation is hampering our most important tool in treatment. As per the guidelines, a clinician using N95 mask, face shield, and social distancing makes the verbal communication part very difficult while talking, reflecting, and summarizing. Third : Telemedicine. We had used video conferencing for our patients who were not in a physical condition to come to the clinic and found it very useful. Telemedicine, a known method of delivering medical services, now becomes a critical technology to deliver palliative care. It has many advantages including maintenance of social distancing, saving travel time, convenient and save resources like personal protective equipment (PPE) (Khurana et al, 2020)

In summary, our study indicate that continuation of anticancer treatment during the COVID-19 pandemic seems to be safe and feasible, if adequate and strict infection control measures are enforced. More detailed studies of COVID-19 infection in patients with cancer may help to guide management of oncology patients in future.

CONCLUSION

The best way to management of care for cancer patients during the Covid-19 pandemic is depend on patient's condition. Patients with stable cancer who do not need faced intensive treatment and cancer patients with symptoms of Covid-19 should postpone the faced treatment. Telemedicine is a great way for them because the cancer treatments are continous and it reduces the risk of infections both Patients and caregivers. While the cancer patients who need intensive treatment and no symptoms of Covid-19 provide faced treatment but with health protocols such as separating the cancer patient entrance with other patients, using masks, face shields, and other health protocols.

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Appendix 1

Title	Year	Population	Type of research	Location	Result
Care of immunocompromised patients with head and neck cancer during the COVID-19 pandemic: Two challenging and informative clinical cases (Civantos et al., 2020)	2020	cancer patients and in those receiving chemotherapy	Cohort Studi	Department of Oncology, Addenbrooke's Hospital, Cambridge University Hospitals NHS Foundation Trust, Cambridge, UK	In summary, IFR for COVID-19 is about 1% in the general population but is probably significantly higher among cancer patients (up to 30%) and even greater in those who are undergoing active treatment with cytotoxic chemotherapy (with estimates up to 45%). The magnitude of increased risk conferred by cancer during the current pandemic is comparable with that in past influenza pandemics. Up to 40% of patients diagnosed with cancer this year may have a IFR from COVID-19 of more than 5%. However, the survival benefit conferred by adjuvant chemotherapy is expected, in most cases, to exceed the increased risk of death from COVID-19
New Strategy of Home-Based Exercise during Pandemic COVID-19 in Breast Cancer Patients: A Case Study (Grazioli et al., 2020)	2020	all adult patients (aged ≥18 years) with any type of malignant solid tumours and haematological malignancy	Cohort Studi	Wuhan, China	Patients with cancer and COVID-19 were more likely to deteriorate into severe illness than those without cancer. The risk factors identified here could be helpful for early clinical surveillance of disease progression in patients with cancer who present with COVID-19.
Radical change in osteosarcoma surgical plan due to COVID-19 pandemic (Gaston et al., 2020)	2020	Patients with cancer and a laboratory-confirmed diagnosis of COVID-19	Cohort Studi	Montreal, Canad	Our study in patients with cancer demonstrates a high mortality from COVID-19 in the adult population. This is the first report that describes a high rate of hospital0 10 20 30 40 50 60 0 20 40 60 80 100 Time (days) Overall survival (% of patients) Stage IV Stage I-II-III *** A. B. C. 0 10 20 30 40 50 60 0 20 40 60 80 100 Time (days) Overall survival (% of patients) Age
Telerehabilitation for people with breast cancer through the COVID-19 pandemic in chile (de Rezende et al., 2020)	2020	health workers	Qualitative	America	This study examined the experiences of healthcare providers caring for older adults with cancer during the COVID-19 pandemic. Providers noted several barriers to the treatment of older patients, especially organizational challenges and patients' access to resources and support. Questions from older adults with cancer focused on their personal health and cancer care (e.g., delayed treatment, risk of infection), their basic needs and support (e.g., caregiving, transportation), as well as general questions about the future and COVID-19 timeline. More research is needed to understand the short- and long-term impact of COVID-19 on the care provision of older adults with cancer. In addition, this research insists upon resource and support allocation for older adults with cancer as well as healthcare providers during the COVID19 pandemic.
Care of immunocompromised patients with head and neck cancer during the COVID-19 pandemic: Two challenging and informative clinical cases	2020	Patient with head and neck cancer	Case study	University of Pennsylvania	The current rule of thumb in the face of this pandemic is cancellation of elective appointments and surgeries; however, no cancer treatment is truly elective. Decision making for all patients with operable cancers requires a nuanced approach, especially when there is the added complication of comorbid immunosuppression as in the two cases we present. We favor operating when

(Civantos et al., 2020)					there is a concern for future airway obstruction or lifethreatening bleeding if treatment is delayed. If the decision is made to operate, appropriate PPE, such as an N95 mask with a face shield and eye protection, is of utmost importance to protect the entire surgical team as well as the patient. elemedicine appointments and photographic monitoring should be used whenever feasible in order to allow home isolation. Most importantly, we recommend an honest discussion of the situation with the patient, taking into account their comfort and goals of care.
New Strategy of Home-Based Exercise during Pandemic COVID-19 in Breast Cancer Patients: A Case Study (Grazioli et al., 2020)	2020	Two patients with breast carcinoma	Case study	the Sant'Andrea UOC of Medical Oncology in Rome, Italy	The results of this case study indicate that this CT protocol can improve QoL and fatigue perception in breast cancer patients undergoing adjuvant therapy. Both patients performed all sessions without adverse events and dropping out, evidencing the sustainability of an online protocol using video-calling and supervised by a specialized trainer. Moreover, the positive e_ect in several functional and psychological parameters supported the suggested improvements of QoL in these patients, even during the lockdown, which could be a stressful period. point of the patient, that did not allow for great di_erences in this score. The analysis the data showed an improvement in physical and general fatigue in both patients. Fatigue is the most common symptom reported by BC patients, which strongly a_ects QoL [24,25]. These improvements in fatigue variables, particularly in cognitive and physical fatigue, were in accordance with the findings reported by several studies [23,26]. In both patients, the significant decrease in emotional fatigue supports the positive impact of online CT for this disabling symptom. Despite the fact that they were living a difficult psychological moment due to the pandemic COVID-19 period, it may be possible that the patients felt supported and not left alone during these hard times. At the end of the training period (16 weeks), the patients reported feeling less fatigue, especially when they started from a higher sensation of fatigue. Patient B, who showed more changes in body composition, felt more toned, and both women indicated that they felt stronger and more resilient than before the CT protocol.
Radical change in osteosarcoma surgical plan due to COVID-19 pandemic (Gaston et al., 2020)	2020	A patient with osteosarcoma	Case study	Department of Orthopedics, Quirino Memorial Medical Center, Quezon City, Philippines 2 Department of Orthopedics, College of Medicine and	There have been few reports to guide treatment of sarcoma patients during the time of COVID-19, both published in April, well into the pandemic, and were not available during our multidisciplinary discussions. The French Sarcoma Group and Drs Cardoso and Rodrigues-Pinto wrote recommendations for the general treatment of sarcomas during COVID-19 outbreak.Both underscored the need for continued treatment of osteosarcomas

				Philippine General Hospital, University of the Philippines Manila, Manila, Philippines	and that surgery for those patients having had neoadjuvant chemotherapy should be prioritised. Their reasoning to avoid delays that could compromise curative outcomes was in keeping with the treatment approach taken in our patient. The main dilemma in our case was the change in surgical plan from limb salvage surgery to a proximal limb amputation. Up to the time of writing, there have been no studies regarding the safety of limb salvage surgery during this viral outbreak. The primary consideration taken into this decision was the risk of contracting nosocomial COVID-19 if the osteosarcoma patient underwent limb salvage versus an amputation. The initially planned limb salvage procedure for our patient was an extraarticular resection of the proximal humerus and reconstruction with a bone cement prosthesis, which would have required longer operative time, longer hospital stay and repeated follow- up as compared with a forequarter amputation. At the time of multidisciplinary family discussions, longer exposure to the hospital [18 19] environment was thought to have a higher risk of developing COVID-19. Current reports have since confirmed this as well as the complications associated with nosocomial COVID-19 infection.[22 23] Luong- Nguyen *et al* reported a 4.9% nosocomial infection rate for patients admitted for a gastric surgery with all patients developing at least one postoperative complication.Aside from adequate hygiene and personal protective equipment (PPE) use, they recommended reducing hospital stay to avoid viral exposure. Having dedicated COVID-19 negative centres with good screening procedures for elective surgery is another option to decrease risk of patient contamination. Other precautions taken for our patient to avoid exposure included home recovery and telemedicine consult, which have become popular during this pandemic. [24 25]
Telerehabilitation for people with breast cancer through the COVID-19 pandemic in Chile (de Rezende et al., 2020)	2020	Patient with breast cancer	Case study	The Complejo Asistencial Dr Sótero del Rio	There were six variables which present as facilitating factors to implement this model of tele-rehabilitation: 1) Having an electronic medical record system which allows legal record-keeping and to establish concrete rehabilitation objectives. 2) To have a ultidisciplinary team which maintains good communication. 3) The growth in use of technology in the country (wide internet access and smartphones). 4) Obligatory quarantine, in many cases it enables the company of a family member to assist the patient to manage the technology. 5) Creation of a webpage with facilitates asynchronous contact with the person. 6) High levels of commitment and motivation of therapists/patients to participate in this new model.

					The barriers to implementing the telerehabilitation model relate to the difficulty in coordinating the synchronous therapist – patient checkups, and the inability to Perform a complete physical examination, which for physiotherapists is essential, especially as palpation is prevented, for which they now rely on the patient's perception.
The New Normal in the Clinic: Overcoming Challenges in Palliative Care	2020	Of all patients coming to the clinic and inpatient referrals.	An observation	New Delhi, India	Modifications needed in the current situation to providepalliative care: 1. Screening for cancer patients Separate entrance for cancer patients should be made. Cancer patients should be screened and specific questions related to symptoms of COVID-19 should be asked. History of fever cough, cold, diarrhea, and whether living in a containment zone should be asked. The temperature should be checked by a noncontact, infrared thermometer. 2. Communication skills 3. Telemedicine 4. Telemedicine setup
Smartphone-Based Telemedicine Service at Palliative Care Unit during Nationwide Lockdown: Our Initial Experience at a Tertiary Care Cancer Hospital	2020	314 patients	A prospective analysis	India	COVID-19 pandemic may get over it sometime, but it will change our practices for the long term. Telemedicine is going to be the future of health-care delivery systems. In PC, we deal with immunocompromised debilitated cancer patients who are at risk of infection. Hence, telemedicine is going to be helpful for us to provide holistic PC to these patients. In our study, we have found that it is feasible to assist the patients to manage their symptoms by providing real-time assessment using smartphone-based applications. Setting up a multidiscipline setup for telemedicine may improve the service and patient satisfaction significantly. In further evaluation, we also should include the psychological aspects of patients and caregivers for improving our holistic care to cancer patients.
Infection rate and clinical management of cancer patients during the COVID-19 pandemic: experience from a tertiary care hospital in northern Italy (Fong et al., 2020)	2020	All consecutive patients with haematooncological diseases treated at the haematooncology day unit of the "Franz Tappeiner" Hospital in Merano from 15 March 2020 to 9 April 2020 were included in this analysis.	Cohort Study		Cancer management in this journal: Prior to the examination, the Covid-19 health protocol was applied. Then the patient is placed to keep a distance of at least two meter during treatment. That health care team separate cyclic (move to base) to reduce risk of infection. For patients who are not receive active therapy, routine follow-up visits are minimized or postponed, and medical care is provided by telemedicine on a case by case basis. Besides, be patient repeatedly educated and encouraged to apply standards are determined precisely and consequently practicing social and physical distancing. In the next phase plague, the widely available testing tool makes it it is also possible to screen the entire health care team many COVID-19 patients in the clinic.
Evidence-based guidelines for managing patients with primary ER+ HER2– breast cancer deferred from surgery due to the	2020	454 patients treated in Edinburgh between 2001 and 2016 with neoadjuvant letrozole for a mean 206 days.	Pre experimental	Edinburgh	Based on tumor ER and/or PgR expression at diagnosis and (if available) baseline Ki67, postmenopausal patients with hormone receptor positive HER2-negative early breast cancer can be stratified for immediate surgery or neoadjuvant chemotherapy (Group 1) and others selected for NeoET (Group 3). Management of the remaining patients (Group2) is dependent on Ki67 assessment.

COVID-19 pandemic (Dowsett et al., 2020)		Group 1: (~5%) should NOT be considered for NeoET Group 2: (~35%) may be considered for NeoET, provided that endocrine responsiveness is demonstrated as follows. Group 3: (~60%) may remain on NeoET for at least 6 months			Group 2 patients with baseline Ki67 ≤ 15% may continue on NeoET, while the remainder should be considered for a biopsy for Ki67 at 2–4 weeks to see if Ki67 ≤ 10%, so they can continue on NeoET. Group 2 patients whose on-treatment Ki67 is >10% should not continue on NeoET. NeoET may also be an option for premenopausal patients and on-treatment Ki67 may be a helpful guide. We propose the flow diagrams based on these groupings (Fig. 1a, b) to assist clinicians in the selection of postmenopausal patients likely to have acceptable outcomes on NeoET and at the same time prioritise a smaller group for surgery if operating room capacity allows, or for neoadjuvant chemotherapy as as alternative.
Utility of a mainstreamed genetic testing pathway in breast and ovarian cancer patients during the COVID-19 pandemic (Benusiglio et al., 2020)	2020	234 patients 223 women and 11 men) Breast and ovarian cancer (BC/OC) patients was established in Jan-2018 between the Assistance Publique - Hopitaux ˆ de Paris.	observasional	Paris, France	More generally, we have shown for the first time that MGT could be successfully implemented in France, a country with a more conservative attitude to genetic testing compared to the UK or US. It allowed for the rapid testing of 234 patients at their point of care. O/G were comfortable using a computerized version of the Manchester Scoring System for patient selection. The 12.1% PV detection rate at the 12-point threshold was comparable to rates observed in more traditional settings in France, but slightly higher than rates reported in British patients
Continuing surgical care in cancer patients during the nationwide lockdown in the COVID-19 pandemic—Perioperative outcomes from a tertiary care cancer center in India (Pai et al., 2020)	2020	184 patients	An observasional study	India	In a region with milder impact of COVID-19, treatment of cancer patients need not be deferred. Our study showed that with appropriate precautions, asymptomatic patients may undergo operations without increased morbidity to them and hospital staff.