

Oncology Nursing Challenges during COVID-19 Outbreak: Precautions and Guidance

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Started in late December 2019 in Wuhan, China, initially as a pneumonia-type illness that quickly escalated to the global pandemic, coronavirus disease 2019 (COVID-19) is caused by the severe acute respiratory syndrome coronavirus 2.^[1] The COVID-19 outbreak has affected the health-care services worldwide concerning limited availability of ventilators and beds and requirements for multispecialty care, as the disease leads to cardiac, renal, hematological, and even neurological problems. The fact that so much is unknown about this highly contagious disease has led to fear in the public. The high rates of infections, serious illnesses, and death in health-care providers have added to the stress and even some trepidation among health-care providers. In addition, routine health-care services are in a restricted mode to control the spread of COVID-19 in the community and to conserve resources for patients infected with COVID-19.

Many studies report that people with certain preexisting disease conditions such as hypertension, diabetes, cardiovascular disease, respiratory disease, and cancers are at a higher risk if they acquire COVID-19 for developing serious illnesses and are more likely to require hospital admission and intensive care, and their risk of death is increased. Cancer patients are found to have a two times

higher risk of coronavirus infection as estimated by the World Health Organization (WHO) in the China Joint Mission on COVID-19.^[1] Shankar *et al.*^[2] reported that cancer patients require multiple hospital visits for their diagnoses and treatments (chemotherapy, radiotherapy, targeted therapy, and immunotherapy) over a course of many weeks and the cancer treatments weaken their immune system, predisposing them to a higher risk of contracting community and hospital infections including coronavirus.

Nurses play an important role in cancer care delivery in all forms of treatment and work on the frontline in managing cancer care. Their work includes but is not limited to coordination of patient care, documentation of all related medical reports, record collation, patient assessments, administration of chemotherapy through correct route as per direction, management and observation of patients during surgery, chemotherapy and radiotherapy treatments, management of symptoms, and side effects of treatment(s) as per the oncologists' prescription. Nurses work and assist in various cancer disciplines and settings such as radiation oncology, surgical oncology, medical oncology, day care, palliative and supportive care, and ambulatory care.^[3] Other responsibilities involve taking care of central line

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devices, wounds, assisting and supervising hygiene, linen changes, and numerous daily tasks. Nurses perform the most important tasks of nursing care for the patients and provide invaluable moral support to the patient and attendants.

In the current COVID-19 outbreak, not only immunocompromised cancer patients are at a higher risk of exposure to coronavirus infection when visiting cancer centers but also cancer care providers, especially oncology nurses who spend more time with patients, have an increased risk when managing cancer patients, which is a much higher risk if the hospital admits patients testing positive for COVID-19.

Many cancer centers have delayed, postponed, or rescheduled appointments to reduce the exposure to coronavirus for both cancer patients and cancer care providers. However, certain types of cancer such as advanced stage metastatic cancers and rapidly progressive tumors require urgent intervention to give any chance of survival to these patients.^[2] The risk of delaying cancer treatment reduces outcome, and continued malignancy decreases the immunity of patients; this situation results in the increased risk of exposure for both immunocompromised cancer patients and cancer care providers. If the immunocompromised patients become infected with COVID-19, they are also more likely to spread the virus for prolonged periods of time, further exacerbating this effect and putting all nursing staff at risk.

Many concerns and questions are being raised by oncology nurses about the precautions when managing cancer patients during the current COVID-19 outbreak.

Oncology nursing challenges during the coronavirus disease-2019 outbreak

The major challenge is managing cancer patients when limiting the risk of coronavirus infection to the nursing staff. Although oncology nurses use personal protective equipment (PPE) routinely such as disposable gowns, masks, caps, gloves, and shoe covers, they also use protective wear for administering and preparing chemotherapy such as goggles and chemotherapy-grade gloves. Cancer patients are frequently isolated during certain procedures in cancer care as in bone marrow transplant, radioisotope therapy, or myelosuppression chemotherapy. Now, PPE is required to protect the nurses, and shortages of PPE are reported in many countries due to the current pandemic. In normal circumstances, PPE is taken for granted but is now a scarce commodity caused by the shortage of supply and higher demand to manage patients with COVID-19.^[4] It is now known that asymptomatic coronavirus carriers can spread the disease, which means that patients, attendants, or even healthy-appearing staff can spread the infection.^[5]

Hospital resources, beds, intensive care unit, and

ventilators are being diverted for the care of patients with COVID-19 leaving less resources for cancer patients, especially those who are on palliative care. The management of such cancer patients, which is a challenging task in normal circumstances, is an even more challenging task today with limited resources.

In many regions, oncology nurses are being relocated to COVID-19 centers to care for suspected or confirmed patients with COVID-19 or quarantine centers due to the shortage of human resources. Such nurses may pose an increased risk to cancer patients if their shifts rotate with their normal cancer care routine. Worldwide, the shortage of oncology nurses is affecting cancer care,^[6] and relocating may further affect the same. Prior additional training is required before posting in such settings to reduce the chance of unintentional exposure when managing such patients. The donning and doffing of PPE are quite different from the order and sequence used for aseptic procedures and operation rooms. Discarding of used PPE and the disinfection of frequently used surfaces are new protocols that must be learned quickly.

Guidance and precautions

Many hospitals and health-care facilities have developed protocols to maximize the use of PPE in rational and appropriate manners such as reusing. The WHO estimated the requirement of approximately 89 million masks, 76 million gloves, and 1.6 million goggles per month to manage COVID-19 cases.^[4] Various oncology nursing organization/societies have released recommendations and guidelines regarding COVID-19.^[7]

Telephonic triage may be adapted to reduce patients' unnecessary hospital visits and crowding at hospitals. Oncology nurses may use a screening questionnaire for any symptoms related to COVID-19, and if any patients or caregivers are suspected of having such symptoms, they will be isolated and inform the consultant. Nurses must ensure that all cancer patients and caregivers cover their mouths during visits. Oncology nurses should practice standard precautions when managing cancer patients, wear clean and sterile PPE, and perform hand hygiene after managing every cancer case. More precautions should be used when attending aerosol-generating procedures such as intubations. Proper disposal of waste generated during cancer care must be done. In the case of limited room availability due to COVID-19, cancer patients' beds should be kept more than 1 m apart in the ward.^[1]

In case of any flu-like symptoms or suspected COVID-19 symptoms or contact with COVID-19-positive cases, oncology nurses need to inform their authorities, test themselves for COVID-19, and quarantine for 14 days.^[1]

It is important to keep up the morale of the staff and

accommodate their safety concerns. During the lockdown, the arrangement of transportation for nurses to and from work is vitally important, especially in India, where many of the nurses use public transportation. The closing of state lines means that travel passes need to be obtained and distributed. Assistance with food packages and a sympathetic ear for other problems is necessary to prevent burnout due to the uncertainty and difficulties caused by country-wide lockdowns. Staying connected through e-mail, phone, or other media groups and sharing positive and useful messages to keep motivated in this difficult and different time are important.

Clear guidelines are needed so that everyone knows what to do if they are exposed to a patient with COVID-19 or feel they are symptomatic. Each hospital should provide free testing and speedy reports, and if exposure occurs, clear advice about home quarantine or provisions for hospitalization depending on the situation must be made. Regular checkups of the nursing staff to ensure that any symptomatic nurse is not working with minor cold and cough symptoms are necessary to prevent multiple others getting infected and resulting in the quarantine of many more nurses. Social distancing of the staff should be enforced to avoid infecting others, staggering breaks, and avoiding people eating together, which are necessities. This protocol will go a long way in allaying fear and preventing dangerous mistakes.

Conclusion

COVID-19 crisis may increase the need for ambulatory care at this time when hospital visits are restricted, as patients too do not want to visit due to fear of exposure to the coronavirus. This may result in an unexpected benefit of the development of care facilities and expertise at centers closer to patients' residences and put an emphasis in district hospital-based oncology care. For cancer patients to receive treatment at home or in a district hospital, excellent nursing care will be required to keep patients safe, comfortable, and for the management of any adverse reactions during treatments.^[8]

Supporting cancer patients during their cancer treatment by monitoring their physical and emotional health is a

central role of oncology nurses in cancer care, and their role is becoming more important when managing cases care amid the COVID-19 crisis. The WHO has declared 2020 as the International Year of the Nurse, recognizing their tremendous work in health-care services. Maintaining a balance between exposure to the coronavirus infection and cancer care must be assessed first to avoid unnecessary anxiety and panic among cancer patients.

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Conflicts of interest

There are no conflicts of interest.

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