As the coronavirus spread from Asia to Western Europe and North America, healthcare institutions in the Middle East, Africa, South Asia, and Latin America prepared for the COVID-19 pandemic. Interprofessional task forces were established to coordinate institutions’ responses, inventory supplies of personal protective equipment, educate staff and patients, develop procedures for triaging patients and prioritizing care, and provide support to nurses to mitigate their stress. Despite challenges, nurses continued to deliver quality care to patients with cancer.

**AT A GLANCE**

- The challenges faced by low- and middle-income countries (LMICs) in preparing for the COVID-19 pandemic are compounded by existing issues, such as extreme poverty and lack of access to clean water, sanitation, and hygiene facilities.
- Approaches to educating patients about prevention of coronavirus infection in LMICs include posters, telephone calls, short message service text messages, and hospital public address system announcements.
- Concerns expressed by oncology nurses in LMICs, such as fear of contracting COVID-19 and spreading it to their loved ones or immunocompromised patients, are similar to those of oncology nurses in the United States.

**KEYWORDS**
coronavirus; COVID-19; low- and middle-income countries; pandemic

**DIGITAL OBJECT IDENTIFIER**
10.1188/20.CJON.586-590

---

## COVID-19 Pandemic

Preparation for patients with cancer from the perspective of low- and middle-income countries

Annette Galassi, BSN, MA, RN, OCN®; Tamara Otsuru Augustinho Teixeira, BSN, RN, Edvane Birelo Lopes De Domenico, PhD, RN, Majeda Al-Ruzzieh, PhD, RN, Naomi Oyoe Ohene Oti, MGCNM(ONC), MPH, BSN, and Surya Sukumaran, BSN, RN

Healthcare providers in low- and middle-income countries (LMICs) in the Middle East, Africa, South Asia, and Latin America have faced with unique challenges during preparation for the COVID-19 pandemic, including extreme poverty, illiteracy, lack of access to clean water and sanitation, food insecurity, inadequate infection control practices, and scarce personal protective equipment (PPE) (Kugbey et al., 2020; Rutayisire et al., 2020). This article provides a snapshot of the preparations made at four institutions—comprehensive cancer centers in Jordan and India, a large urban tertiary care hospital in Ghana, and an academic medical center in Brazil—as of June 2020.

Each institution established a core team or task force, which included nurses with clinical and management experience, to prepare for and respond to the COVID-19 pandemic. These teams were established either as soon as the first case was diagnosed in the country or at the time the World Health Organization (WHO) declared the pandemic. Each hospital developed standard operating procedures and guidelines for the care of patients with cancer during the pandemic and conducted training on COVID-19 signs, symptoms, and transmission, as well as infection prevention and control protocols. Oncology nurses dealt with similar challenges regardless of the country where they worked (see Figure 1).

### The Middle East: Jordan

King Hussein Cancer Center (KHCC) in Amman, Jordan, is a Magnet®-designated, not-for-profit hospital with a 350-bed capacity and about 1,200 nurses on staff. The center delivers comprehensive care for adult and pediatric patients diagnosed with cancer. Jordanian government regulations required that any suspected case of COVID-19 be referred to predefined public hospitals; consequently, only 25 isolation beds at KHCC were prepared for suspected cases pending transfer to these hospitals.

A telephone screening protocol was implemented for all patients planning to visit the hospital, and screening at designated triage areas at hospital entrances was established. The nurses educated patients and families about prevention of transmission of the coronavirus using a variety of methods, such as telephone calls, short message service text messages, and one-on-one teaching during routine hospital visits. Many educational materials, such as posters and leaflets, were prepared to support the educational process (Ministry of Health. The Hashemite Kingdom of Jordan, 2020).

KHCC has adequate hand sanitizer and PPE in strategic inventory for three to six months. This includes disposable...