

TELEHEALTH AND NURSING DURING THE COVID-19 PANDEMIC IN BRAZIL

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Several cases of pneumonia of an unknown cause were reported in Wuhan, Hubei province, China, in December 2019. This pneumonia quickly spread to other provinces and countries. In January 2020, a new coronavirus was identified and named 2019nCoV by the World Health Organization (WHO)⁽¹⁾, which declared an outbreak and Public Health Emergency of International Concern (PHEIC). In February 2020, the new virus was renamed Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) by the International Committee on Taxonomy of Viruses (ICTV) and the WHO announced the epidemic disease caused by this virus as the Coronavirus 2019 (COVID-19)⁽²⁾.

Actions were taken in Brazil immediately after rumors regarding the emerging disease were spread. In January 2020, the Health Surveillance Secretariat (SVS in Portuguese) was activated through the Ministry of Health (MH), seeking to harmonize, plan, and organize activities and monitor the epidemiological situation in the country. Many government sectors were mobilized and several actions were implemented, including the elaboration of a contingency plan. In February 2020, human infection with the new coronavirus was declared a Public Health Emergency of National Concern (PHENC)⁽³⁾.

The first case of COVID-19 in Brazil was confirmed on February 26th, 2020. Community transmission was already occurring in some municipalities less than one month after its confirmation. The first death was detected in the country on March 17th, 2020, and on March 20th, 2020, community transmission was recognized throughout the national territory⁽³⁾.

The disease has progressed very quickly and has been a challenge for everyone. Governments have adopted social distance as the main strategy to reduce and mitigate the spread of the epidemic considering that the usual capacity for health services has exceeded its limits in many countries. Since then, Telehealth has become an important strategy in fighting the pandemic and supporting health systems, especially concerning public health, prevention, and clinical practices, as well as in other sectors such as teleworking and the support for training and Permanent Health Education (PHE)⁽⁴⁾.

Thus, the concern with the progress of the disease has aroused the interest of governments and health professionals in exploring the potential of using Information and Communication Technologies (ICT) to face the many challenges arising from the pandemic. ICT and its integration in health care delivery systems provide opportunities for improving clinical care, especially where distance is a critical factor⁽⁵⁾.

In the Brazilian context, the Telessaúde Brasil Redes Program began in 2007, expanding in 2011 to several states in the country⁽⁶⁾. The Telehealth model adopted in Brazil is based on the connection of universities with Primary Health Care (PHC) through Tele-education and Tele-assistance activities, aiming mainly at strengthening the Family Health Strategy (FHS)⁽⁷⁾. The work of the many Telehealth centers in different states, in partnership with universities, has proven to be an important strategy in facing the pandemic, as it allows less circulation of people seeking care in health services, thus reducing the risk of contamination and spread of the disease⁽⁸⁾.

Telehealth involves different approaches, which are summarized in the table below:

Telehealth applications	Activities
Teleconsultations	Consultation registered and conducted between health workers, professionals, and managers aimed at clarifying doubts regarding clinical procedures, health actions, and issues relative to the work process.
Telediagnostics	The use of ICT to support diagnostics through geographic and/or temporal distances includes teleradiology, teleECG, telespirometry, telepathology, etc.
Telemonitoring	Distance monitoring of patient health/disease parameters including clinical data collection, transmission, processing, and management by health professionals.
Teleregulation	Actions in regulating systems, assessment, and planning providing management with an operational regulating intelligence. It allows the reduction of waiting lines for specialized service.
Tele-education	Classes, courses, or interactive learning objects on themes related to health.
Formative second opinion	Systematic response based on the bibliographic review of the best scientific evidence for questions from teleconsultations.
Teleappointments	A distance appointment with a doctor or other health professionals through ICT, which, before the pandemic, was allowed in Brazil by the Federal Medicine Council only in emergency situations.

ECG: electrocardiogram; ICT: information and communication technology.

Source: Caetano et al. (2020)

It is worth mentioning that Telehealth and Telemedicine are distinct terms. Telehealth refers to a broader scope of remote assistance services. Telemedicine refers specifically to remote clinical services, while Telehealth can refer to remote non-clinical services, such as supplier training, administrative meetings, continuing education, and clinical services⁽⁹⁾, not restricted to the medical profession, covering other professional categories, such as nursing.

The role of Nursing in Telehealth actions becomes essential in the context of the COVID-19 pandemic. Nursing has been challenged to innovate and expand the scope of its practice, searching for new possibilities to meet the increased demand for patient services and reduce exposure to the virus⁽¹⁰⁻¹¹⁾. The concept of Telehealth in Nursing has recently developed and encompasses the performance of nursing professionals who care for patients at a distance, through ICT. In this context, the role of Nursing includes performing evaluations and providing services remotely, in addition to helping patients participate in an ICT consultation with a health professional physically located elsewhere⁽¹¹⁾. Another possibility of acting in PHC health units in Brazil is Telenursing, which enables professional training in the workplace through ICT, contributing to PHE. Furthermore, the nursing professional can obtain a second opinion to assist in the decision making of clinical cases and health management through online (synchronous) and offline (asynchronous) teleappointments⁽¹²⁾.

Remote nursing care includes telephone calls, remote monitoring, photographs, and videos. Telephone calls were the first distance method used for nursing care and are still an essential component of care in various settings. Remote monitoring involves the use of electronic devices called peripherals, seeking

to capture patient health data and symptoms for early intervention. These devices consist of blood pressure cuffs, glucose monitors, and pulse oximetry devices⁽¹¹⁾.

Thus, Telehealth is an important tool for nurses, facilitating their performance, especially during the COVID-19 pandemic. However, distance communication can influence the time required for quality interaction, the satisfaction of those involved, and the limitations related to non-verbal communication⁽¹³⁾. A study⁽¹³⁾ has shown that nurses regard interpersonal communication as a challenge in Telehealth, mainly due to the difficulty in perceiving non-verbal signs, requiring the approach to new communication and interaction technologies in professional training.

The COVID-19 pandemic has highlighted Telehealth's contributions to nursing care. However, the impacts of incorporating new technologies in nursing must be constantly evaluated⁽¹³⁾ and an educational preparation expanded, as well as the best practices in Telehealth should be considered to ensure a quality assistance⁽¹⁰⁾.

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