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# Performance of nursing in remote work in the context of pandemic COVID-19

**ABSTRACT** | Objective: to report the experience of developing remote work by the nursing team, its systematization and challenges, during the COVID-19 pandemic. Method: this is a descriptive, exploratory study with a qualitative approach, an experience report type, carried out in a Federal University Hospital in Minas Gerais. Report based on the experience of nurses regarding the performance of remote work in the context of the pandemic COVID-19, from March to July 2020. Results: collaborators in remote work formed the second line of confrontation to COVID-19, executing care protocols, technical work instructions, educational materials, development of light health technologies for the education of professionals and patients and telemonitoring of patients. Conclusion: remote work is an innovation in the nursing work process, expanding the perspectives of care and ensuring the safety of professionals from risk groups.

**Keywords:** Coronavirus; Pandemics; Nursing Care.

**RESUMEN** | Objetivo: informar la experiencia de desarrollar trabajo remoto por parte del equipo de enfermería, su sistematización y desafíos, durante la pandemia de COVID-19. Método: se trata de un estudio exploratorio descriptivo con enfoque cualitativo, un tipo de informe de experiencia, realizado en un Hospital Universitario Federal en Minas Gerais. Informe basado en la experiencia de las enfermeras sobre el desempeño del trabajo remoto en el contexto de la pandemia COVID-19, de marzo a julio de 2020. Resultados: los colaboradores en el trabajo remoto formaron la segunda línea de confrontación con COVID-19, ejecutando protocolos de atención, instrucciones de trabajo técnico, materiales educativos, desarrollo de tecnologías de salud ligera para la educación de profesionales y pacientes y telemonitorización de pacientes. Conclusión: el trabajo remoto es una innovación en el proceso de trabajo de enfermería, que amplía las perspectivas de atención y garantiza la seguridad de los profesionales de los grupos de riesgo.

**Palabras claves:** Coronavirus; Pandemias; Atención de Enfermería.

**RESUMO** | Objetivo: relatar a experiência de desenvolvimento do trabalho remoto pela equipe de enfermagem, sua sistematização e desafios, durante a pandemia da COVID-19. Método: trata-se de um estudo de natureza descritiva, exploratória, com abordagem qualitativa, do tipo relato de experiência, realizado em um Hospital Universitário Federal de Minas Gerais. Relato baseado na experiência de enfermeiras frente à realização de trabalho remoto no contexto da pandemia COVID-19, no período de março a julho de 2020. Resultados: colaboradores em trabalho remoto formaram a segunda linha de enfrentamento à COVID-19, executando protocolos assistenciais, instruções técnicas de trabalho, materiais educativos, desenvolvimento de tecnologias leves em saúde para educação de profissionais e pacientes e telemonitoramento de pacientes. Conclusão: o trabalho remoto é uma inovação no processo de trabalho da enfermagem ampliando as perspectivas do cuidado e garantindo a segurança dos profissionais dos grupos de risco.

**Palavras-chaves:** Coronavírus; Pandemia; Cuidados de Enfermagem.

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## INTRODUCTION

The SARS-CoV-2 virus, is a new subtype of coronavirus that appeared in late 2019, responsible for the disease COVID-19. (1) On January 30th, 2020, the World Health Organization (WHO) decreed a public health emergency of international importance (2) and a pandemic on March 11th, 2020. (3) According to data from April 2020, 210 countries had 2.1 million confirmed cases and more than 144 thousand deaths. (4)

Among the groups most vulnerable to the disease, there are health service workers at high risk for contamination, and they represented a significant portion of the number of cases. (5) The indicators on exposure and contagion, lethality and morbidity of COVID-19

among health workers, indicate in several countries around the world the variation between 4% and 12% of the reported cases. (6)

Brazil, up to the beginning of May 2020, had 31,790 confirmed cases in health professionals. In total, 199,768 were identified as suspicious cases and needed to be removed, the most affected being: nursing technicians or assistants (34.2%), nurses (16.9%) and doctors (13.3%) (7).

The National Health Council, in Technical Opinion No. 128/2020, guides the work of health professionals during the COVID-19 pandemic, recommending that health managers should ensure that health professionals have the right to exercise their work in safe places when they are in conditions of risk to life or health, as in the case of

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professionals in situations of greater vulnerability.<sup>(6)</sup>

In the face of the pandemic, the high risk of contamination of health professionals and the susceptibility of many of them due to pre-existing vulnerabilities, it became necessary to leave the work posts, and a new type of nursing practice was necessary to be employed, in which professionals remain in social isolation and, continuing the activities inherent to the nursing practice necessary to face the pandemic, as well as, guaranteeing their safety.

In the meantime, we have the so-called remote work in nursing, which is an innovation in the work process and a facet in the transformation of work relationships and patient care that emerged through the pandemic of COVID-19.

In this context, this study aims to report the experience of developing remote work by the nursing staff of a federal public hospital, its systematization and challenges, during the COVID-19 pandemic.

#### METHOD

This is a descriptive, exploratory study with a qualitative approach, of the type of experience report, carried out at a Federal University Hospital in the city of Belo Horizonte, Minas Gerais. The report was based on the experience of nurses regarding the performance of remote work in the context of the COVID-19 pandemic, from March to July 2020.

Theoretical basis of literature was carried out because it is an emerging theme. The survey of the state of the art in national and international databases was chosen for better understanding and reasoning on the topic.

The survey of articles was conducted in July 2020 at the Virtual Health Library (VHL) directing searches in the databases: Medical Literature Analysis and Retrieval System Online (MEDLINE), Latin American and Caribbean



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Literature in Health Sciences (LILACS), Database in Nursing (Banco de Dados em Enfermagem - BDENF) and Pubmed, having as inclusion criteria: complete articles, published from January to July 2020, available in Portuguese, English or Spanish. For this purpose, the indexed descriptors were used: coronavirus; pandemic; nursing care.

Due to the theme being new and with the construction of recent evidence, no publication was excluded. The information extracted from the articles was compiled into a data collection instrument built by the researchers themselves containing: article title, indexed database, author, country of origin, language, year of publication, place of research, methods, response the guiding question and main conclusions.

The experience was designed from the direct observation of the researchers in their work environment. As it is an experience report, there was no application of a free and informed consent term.

#### RESULTS: experience report

A In March 2020, Brazilian health institutions faced a challenge, the COVID-19 pandemic, putting the world's health services at risk of collapse due to the high demand for assistance from individuals affected by the disease. On April 16th, 2020, we had in Brazil an incidence of 14,51 cases per 100.000 inhabitants.<sup>(8)</sup>

The disease quickly spread across all continents. Health professionals, for being part of the front line to fight the pandemic, were significantly affected in several countries around the world. Among the classes of health professionals in Brazil, the one with the highest number of cases and deaths, were workers of the nursing team.

Aiming at occupational protection, lines of confrontation have been laid out in the international literature, and in Brazil, through government delibera-

tions it was predicted that health professionals with greater vulnerability to fatal cases of the disease would be removed from workplaces and activities that deal directly with the new coronavirus.

In this way, federal, public, health care institutions, following such recommendations, removed among their collaborators those from the so-called risk group, that is, immunosuppressed workers, with chronic diseases, pregnant women, etc., who are more predisposed to fatal outcomes, if affected by COVID-19. In this context, about 280 nursing professionals were removed for remote work.

At that moment, a new challenge for nursing emerges: how to assist patients, through a global health crisis, where human resources in health would be scarce, and at the same time maintain the necessary social isolation for workers' safety? And yet: how would remote nursing work be based, maintaining, even if remotely, its essence, which is patient care, and more, at that moment when health care in an emergency and high quality situation was necessary?

The pandemic exposed weaknesses and gaps in health services around the world and precipitated the urgent need to adapt them to cope and maintain quality care.

Collaborators in remote work were strategically used as the second line of coping in COVID-19, contributing to the implementation of care protocols, technical work instructions (TWIs), educational materials, development of light technologies for the education of professionals and patients, telemonitoring of patients.

Remote work was organized by dividing workers into teams, which were always led by nurses. The allocation of professionals by team was based on the area of experience and performance, so there were teams of intensive care, medical clinic, hemodialysis, maternity etc.

At first, the professionals in remote



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work were responsible for the elaboration of the management protocols of COVID-19, educational material, distance training and work instructions that involved the disease. This process was of fundamental importance for the health service, since because it is an emerging disease, health professionals had little or no theoretical and technical knowledge about the disease, at a time when their need was urgent.

Then, the remote work teams extended their activities to elaborate and update other protocols and TWIs of the institution. All documents that subsidize and systematize the hospital's care actions have been updated, demonstrating a high productivity of these teams and a great contribution, since although essential for care, at the present time, they were not priority activities.

Being able to rely on remote workers allowed administrative activities that involve nursing care and that make direct assistance possible, at a time when all the institution's efforts were focused on reorganizing clinical care for infected patients, was crucial and of extreme benefit to the quality and safety of the care provided to patients.

#### DISCUSSION

Health professionals are at high risk of contamination in the epidemiological chain of the disease, due to constant occupational exposure to respond to the demands of the pandemic, and are often under unsatisfactory working conditions to prevent cross-transmission. <sup>(9;10)</sup>

In order to reduce the contamination of health professionals, it is essential that vulnerable professionals are removed from direct assistance to COVID-19, such as: pregnant women; seniors; individuals with a history of chronic or autoimmune diseases. <sup>(11)</sup>

Corroborating the above, it is understood that health institutions must ensure the adoption of measures and

mechanisms for the protection and promotion of health for all workers who work in their services.<sup>(5)</sup>

Brazil is the country where most nursing professionals die from COVID-19: 143 professionals died and there are 16.064 confirmed cases, according to data from June 2020 from the Federal Nursing Council.<sup>(12)</sup>

Among the main measures, remote work has emerged as an innovation in work activities. In this context, employees exercise their functions remotely, making use of teleconferences, video lessons and other communication and productivity execution tools for health care. It is a technological innovation to solve the temporary problems that arose due to the pandemic.<sup>(13)</sup>

Because COVID-19 is an emerging disease, the entire institutional assistance flow needed to be systematized and reorganized on an emergency basis to provide frontline workers with secure

bases, through protocols and technical instructions, for handling it. Thus, they could concentrate their efforts on direct assistance to patients, while the nursing team in remote work would provide the educational and administrative bases to allow safe health care.

This achievement ensured subsidies so that the frontline professionals had a constant technical and scientific basis for the clinical management of COVID-19, in addition to making it possible to maintain the organization of all permanent hospital education, essential to the safe care process, but that it could be left in the background due to the sudden need for transformation and reorganization of assistance to meet the demand of COVID-19.

#### CONCLUSION

Remote work is an innovation in the practice of nursing and in the area of

health and, therefore, a challenge for professionals.

We understand that its execution provided a better organization of the health service in a crisis situation, and its performance as a second line of coping with the pandemic COVID-19, allowed the parties involved in the care of patients to be able to assist them with quality and safety.

The experience of remote work in nursing was beneficial for the institution, as it strengthened permanent education and allowed other administrative activities that were impaired due to the pandemic, to continue to happen; for frontline health professionals, who could be trained and provided continuous theoretical and practical provision to base their exercise on scientific evidence, ensuring safety for themselves and patients; and for professionals in remote work, who produced and met the needs of those mentioned. 🇧🇷

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