Experience Report

TEXTO & CONTEXTO ENFERMAGEM
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TRANSFORMATION OF A SURGICAL CLINIC FOR COVID-19 PATIENTS: EXPERIENCE REPORT

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ABSTRACT

Objective: to report the transformation process of a surgical inpatient unit into a coronavirus patient care unit and the impact on the health of nursing professionals and users of this service, in the opinion of nurses who experienced the process.
Method: this is an experience report of nurses of a surgical inpatient unit of a Federal Teaching Hospital in the Midwest region of Brazil. The experience was presented in three thematic axes: 1) Internal restructuring of the surgical hospitalization unit; 2) Training, personnel management and distribution of resources; 3) Impacts on worker health.
Results: the surgical clinic started to have an exclusive team and flow of single care. Pre-surgical patients were discharged from the hospital with no prospect of returning to the planned treatment. Surgical wards were adapted to isolation wards, and equipment facilities for ventilatory care were optimized. The lack of adequate Personal Protective Equipment and work overload were identified as situations that increase the risk of infection in health professionals.
Conclusion: the study demonstrated unhealthy conditions that favor the physical exhaustion and mental suffering of nursing professionals. New research in occupational health planning which supports the work of health service managers in future pandemic scenarios in Brazil is suggested.

DESCRIPTORS: Pandemics. Nursing. Management of health services. Worker health. Hospital care.

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TRANSFORMAÇÃO DE UMA CLÍNICA CIRÚRGICA PARA ATENDIMENTO A PACIENTES COM COVID 19: RELATO DE EXPERIÊNCIA

RESUMO

Objetivo: relatar o processo de transformação de uma unidade de internação cirúrgica em unidade de atendimento a pacientes infectados pelo novo coronavírus e o impacto na saúde dos profissionais de enfermagem e usuários desse serviço, na opinião de enfermeiros que vivenciaram o processo.
Método: trata-se de um relato de experiência de enfermeiros de uma unidade de internação cirúrgica de um Hospital Escola Federal da região Centro-Oeste do Brasil. A experiência foi apresentada em três eixos temáticos: 1) Reestruturação interna da unidade de internação cirúrgica; 2) Capacitação, gerenciamento de pessoal e distribuição de recursos; 3) Impactos na saúde dos trabalhadores.
Resultados: a clínica cirúrgica passou a contar com equipe exclusiva e fluxo de atendimento único. Pacientes pré-cirúrgicos receberam alta hospitalar sem perspectiva de retorno ao tratamento previsto. Enfermarias cirúrgicas foram adaptadas para enfermarias de isolamento, e instalações de equipamentos para a assistência ventilatória foram otimizadas. A falta de Equipamentos de Proteção Individual adequados e a sobrecarga de trabalho foram apontados como situações que aumentam o risco de infecção para os profissionais da saúde.
Conclusão: o estudo retratou condições insalubres que favorecem o esgotamento físico e o sofrimento mental de profissionais da enfermagem. Sugerem-se novas pesquisas no âmbito do planejamento da saúde ocupacional que possam subsidiar o trabalho de gestores de serviços de saúde em futuros cenários de pandemia no Brasil.

DESCRITORES: Pandemias. Enfermagem. Gestão de serviços de saúde. Saúde do trabalhador. Assistência hospitalar.

TRANSFORMACIÓN DE UNA CLÍNICA QUIRÚRGICA PARA LA ATENCIÓN DE PACIENTES CON COVID 19: REPORTE DE EXPERIENCIA

RESUMEN

Objetivo: relatar el proceso de transformación de una unidad de hospitalización quirúrgica en una unidad de atención al paciente con coronavirus y el impacto en la salud de los profesionales de enfermería y usuarios de este servicio, en la opinión de los enfermeros que vivieron el proceso.
Método: se trata de un relato de experiencia de enfermeros de una unidad de hospitalización quirúrgica de un Hospital Federal de Enseñanza de la región Centro-Oeste de Brasil. La experiencia fue presentada en tres ejes temáticos: 1) Reestructuración interna de la unidad de hospitalización quirúrgica; 2) Capacitación, manejo de personal y distribución de recursos; 3) Impactos en la salud de los trabajadores.
Resultados: la clínica quirúrgica pasó a tener un equipo exclusivo y un flujo de atención único. Los pacientes prequirúrgicos fueron dados de alta del hospital sin perspectivas de volver al tratamiento planificado. Se adaptaron los pabellones quirúrgicos a pabellones de aislamiento y se optimizaron las instalaciones de equipos para el cuidado ventilatorio. La falta de Equipos de Protección Individual adecuados y la sobrecarga de trabajo fueron identificadas como situaciones que aumentan el riesgo de infección para los profesionales de la salud.
Conclusión: el estudio demostró condiciones insalubres que favorecen el desgaste físico y el sufrimiento psíquico de los profesionales de enfermería. Se sugiere nueva investigación en planificación de salud ocupacional que apoye el trabajo de los gestores de servicios de salud en futuros escenarios de pandemia en Brasil.

DESCRIPTORES: Pandemias. Enfermería. Gestión de servicios de salud. Salud del trabajador. Atención hospitalaria.

INTRODUCTION

The COVID-19 pandemic has caused important challenges to health services globally, with negative repercussions on people's lives, with regard to the physical, social, economic, emotional and cultural aspects[1–2]. Changes in health practices have become necessary, forcing services to implement abrupt changes in their physical structure, either due to the need to meet the increased demand for hospitalizations, or the emergence of new evidence on the most appropriate coping with this new infectious agent[3–4].

Regarding the pandemic in Brazil and after 15 months of health emergency, it is essential to take a look at how health services have been modified to deal with this reality. Questioning: Did the adjustments in the structure of existing health services preserve the right of citizens to universal access to the Unified Health System (SUS), ensuring the safety of health professionals? Are the coping measures adopted by Brazilian health services in line with the physical and mental preservation of health workers?

Knowledge about this reality experienced by professionals from different cultures and by health care service users is still scarce. On the one hand, nursing professionals who work hard and fight against COVID-19 experienced a considerable increase in work overload, in addition to the increased risk of infection[5]. The nursing team makes up more than 65% of the workforce in health services, and the nature of their activities implies continuous and prolonged contact with patients[6–4]. These implications contribute to intense psychological suffering and unspeakable consequences to the health of these workers, such as depression and physical and mental exhaustion, which may also have been influenced by sudden changes in workplaces[7–8].

However, for SUS users, and those with chronic comorbidities, the current health condition shows that they are in an even more vulnerable situation due to the harsh adaptive repercussions to health services[9]. Studies reveal that, as a result of the increase in care for patients with COVID-19, there was a decrease in the supply of other health care services, in addition to difficult access to elective care for patients with chronic diseases[10–11].

Thus, successful experiences in coping with the COVID-19 pandemic is important so that the confrontation of future pandemics can be more successful. The aim of this study was to report the transformation process of a surgical inpatient unit into a COVID-19 patient unit and its impact on the health of nursing professionals and users of this service, from the point of view of nurses who experienced the process.

METHOD

This is a nurses' experience report on the transformation process of a surgical unit of a Federal School Hospital in the Midwest region of Brazil into an exclusive care unit for COVID-19 patients. The process began in March 2020 and was made available to patients infected with SARS-CoV-2 in April 2020. The hospital is a reference in high complexity care and performs more than 8,000 hospitalizations/year.

The hospital's bed infrastructure at the beginning of the pandemic had 96 surgical inpatient beds, 66 clinical inpatient beds and 14 adult ICU beds, all distributed in inpatient units, including the Medical Clinic, Surgical Clinic, Orthopedic Clinic, Tropical Clinic, Maternity, Nursery, Intensive Care Unit (ICU)-Medical and ICU-Surgical.

The experience was separated into three thematic axes: 1) Internal restructuring of the surgical inpatient unit; 2) Training, personnel management and distribution of resources; 3) Impacts on worker health.

RESULTS AND DISCUSSION

Restructuring of the surgical inpatient unit

The threat of collapse of the health system came to fruition from the uncontrolled increase in COVID-19 cases that required hospitalization, which put pressure on the services to expand their infrastructure of inpatient beds and reorganize the work processes. In response to this need, the *Hospital Escola da Universidade Federal de Goiás* (UFG) underwent important transformations, seeking adaptive measures to care of the new target audience.

Initially, the hospital began to function as a Reference Unit within the Health Care Network (RAS) of the State of Goiás to suspected or confirmed COVID-19 patients. Thus, in line with the recommendations of national and international health organizations, the surgical clinic was made available as an exclusive area for this type of care, which now has an exclusive team and a single care flow[5,12]. Access to the department became restricted to authorized employees in order to minimize the risk of spreading the virus.

Non-emergency surgeries were suspended. Preoperative non-emergency patients were discharged from the hospital without any prospect of returning to the planned treatment. Post-operative patients were transferred to surgical inpatient beds in other departments of the hospital. The suspension of elective surgeries is in accordance with the rules of the Ministry of Health, which consists of limiting the presence of people in hospitals, aiming to minimize physical contact between health professionals and users[12].

However, the application of this measure could be accompanied by alternative care modalities, in order to minimize the impact on the user's access to the health service. For example, the health services of the Lazio region of Italy, which implemented the remote route of care for patients with chronic non-communicable diseases, through the use of telemedicine and strengthening of family medicine[13].

Although it is not the objective of this study to discuss the infrastructure of the entire hospital, it is important to create an overview of the capacity of hospital beds between the pre- and post-COVID-19 periods. In the pre-pandemic period, the hospital maintained 96 beds for surgical inpatients, 66 beds for clinical inpatients and 14 beds for adult Intensive Care Unit (ICU). In response to the pandemic, the restructuring caused the capacity reduction from the previous numbers to 28 surgical beds, 49 clinical beds and increased adult ICU beds to 24. Among the total number of surgical beds, 65 were in the surgical clinic, distributed among 15 wards, two of which were structurally adapted for the hospitalization of patients with infectious diseases, called "Isolation Wards". During the COVID-19 pandemic period, all surgical clinic wards were converted into Respiratory Isolation Wards, each providing an inpatient bed for suspected or confirmed COVID-19 patients, and was destined as a break room for medical staff. During the evolution of the pandemic, the supply of beds for both inpatients and COVID-19 ICU patients was progressively expanded to meet the growing demand. The impact of these changes was felt in the immediate reduction of the supply of certain elective health care for patients with other comorbidities. The objective was always to provide professionals and equipment for the care of patients with COVID-19, as observed in other studies[10–11]. Despite the non-emergency nature, we cannot disregard the damage to the quality of life of patients who needed medical interventions.

The surgical wards have undergone other changes. There was a massive increase in the acquisition of multiparametric monitors, mechanical ventilators, and oxygen therapy equipment were optimized in all work areas, due to the perception of these resources as important treatment tools in the initial phase of the disease. Five months after the inauguration, the wards started to have air conditioning equipment with HEPA filtration and negative pressure, which generated more comfort to

patients and professionals. In the view of nurses, the implementation of this environment control was based on a careful evaluation of the hospital managers regarding the management of the potential risk of viral dissemination in the treatment of COVID-19 patients. This measure was in accordance with national and international safety recommendations for the control of the spread of aerosol-transmitted respiratory diseases[14–15].

Capacity building, personnel management and resource distribution

Hospital care for infected health professionals was guaranteed by the service. Figure 1 shows a flowchart of the health worker care process, in a flowchart notation of the American National Standards Institute[16].

Symptomatic professionals were referred to the emergency room (ER) screening service, where they received medical and hospital care. If their clinical condition indicated the need for hospitalization, the professionals could remain in the ER temporarily until the admission bed in the restructured surgical clinic became available. Otherwise, the worker would receive a medical referral to attend a voluntary reception service for symptomatic health professionals called “UFG Tent”. This service was organized by professors and students of the Faculty of Nursing of UFG and provides laboratory testing for COVID-19 free of charge, with subsequent medical evaluation of the results. The worker received a medical certificate to stay in home isolation until the result was delivered. Upon receiving a positive result for COVID-19, the worker was removed from work activities for 14 days, from the first day of symptom onset, a period considered capable of viral transmissibility[17].

It was noticed that the follow-up of occupational health of workers in the pandemic was not aligned with the protection and risk management measures regarding the exposure of health workers recommended by the international response plan to the pandemic, so that health services test and adequately identify symptomatic workers for COVID-19. However, in compliance with these recommendations, workers with chronic comorbidities proven by medical report and/or the elderly were relocated in other sectors of the hospital, while pregnant women assumed work activities remotely from their residences[5–17].

The removal of high risk workers and COVID-19 cases drastically reduced the number of professionals at the front line, which contributed to absenteeism, consequently generating work overload for professionals. Another picture of this reality is exposed at the Nursing Observatory of Federal Nursing Council (COFEN), showing that, in Brazil, as of July 4, 2020,22,993 nursing professionals became infected and, of these, 238 had died[18].

The current situation has exacerbated the need to replace the nursing workforce, also due to the need for a greater contingent of workers due to the new safety requirements created in the context of COVID-19, preventing some from exercising the profession. In both cases, agility was needed to curb the strain that placed the health system in imbalance, bringing a direct impact to the front line of patient care. This agility can manifest itself, for example, in effective contracts on an emergency basis.

In the first months, front line health professionals workers did not have access to all personal protective equipment (PPE) recommended by international organizations, i.e.: cap, N-95 masks, internal gloves, goggles, protective clothing, disposable waterproof shoe covers, disposable isolation aprons, external gloves and face shield[5–19]. PPE considered indispensable to worker safety, such as masks and waterproof apron, were not initially made available. The commercial surgical mask was no longer provided due to the supply issues and scarcity, and *Spunbonded Meltblown Spunboded* (SMS) masks were produced by sewing teams from the institution itself, which were validated by tests and given authorization for use by the Health Care Related Infection Control Service (SCIRAS).

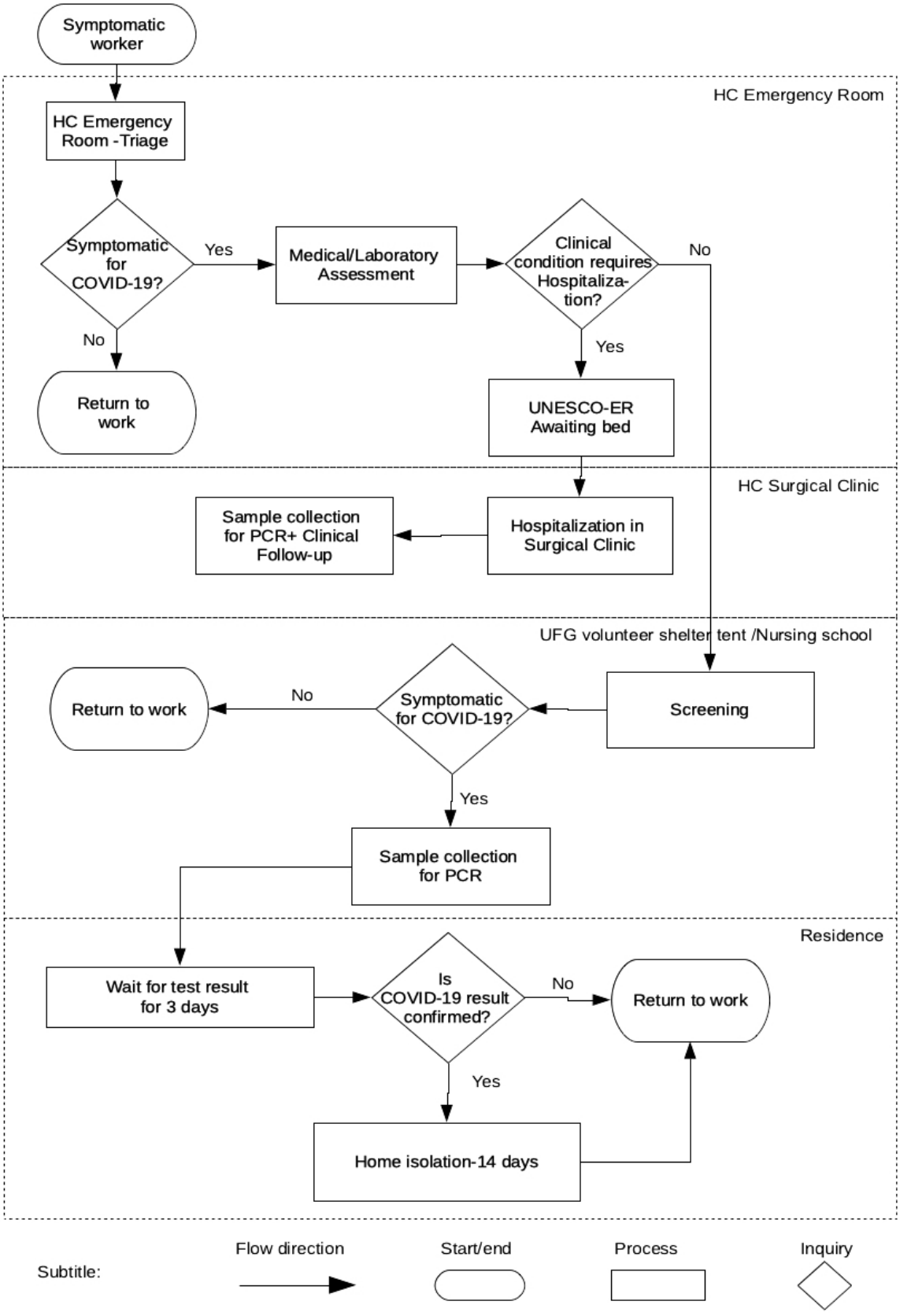

Figure 1 – Care Flowchart of symptomatic worker.
Source: American National Standards Institute flowchart, 1963.

It is known that failures in the protection of workers, such as that observed in the hospital of this report, have been a reality in several countries[20–22]. However, it is worth noting that it is essential that the service provides a safe environment for the health professional, in order to maintain their health and ensure that they do not become vehicles for the transmission of the virus[23].

SCIRAS ostensibly implemented training on paramentation and disparamentation with the entire health team. The professionals participated in "practical training workshops" for the management of emergency situations. However, the continuing education necessary for the new work processes that also met the need for constant updating of knowledge was considered in development by care nurses.

Impacts on worker health

Health professionals are exposed daily to the risk of becoming sick due to the new Coronavirus. However, as the health workforce is heterogeneous, factors associated with working conditions, such as biological exposure and the risk of infection, become intrinsic to the different categories of health professionals[24].

Fear and anxiety were common among professionals who were attending the surgical clinic, place of this experiment. Other perceptions were shared, such as overwork, discrimination by professionals from other sectors of the hospital and society, concern for loved ones, prevailing negative emotions.

Recent research shows that the mental health of health professionals involved in this type of care is significantly affected. Stress and exhaustion, depression and anxiety disorders, difficulty concentrating, feelings of failure, mood swings and fatigue have been frequent outcomes[25–26]. The consequences of chronic stress can cause professionals to experience Burnout syndrome, characterized by emotional exhaustion, excessively detached attitude towards patients and low personal achievement, culminating in medical errors, depression and absenteeism[26].

In Brazil, the majority of people affected by COVID-19 are from the health area. The COVID-19 pandemic generated suffering that overlapped with another existing one caused by the intrinsic overload of the profession: care. It is especially worrisome for nursing, as several factors contribute to the problem being expanded, such as the lack of adequate training to face health problems, the lack of personal protective equipment, close and frequent contact with infected patients, fear and loneliness.

CONCLUSION

Due to the abrupt adaptations made to the infrastructure of health services with the objective of becoming a reference in the care of patients with COVID-19, the present study identified damage to the health and quality of life of health professionals and patients with chronic diseases in need of surgical treatment.

The COVID-19 pandemic challenges health professionals to deal with their own mental health and that of patients. This work promotes reflection and the expansion of knowledge regarding successful initiatives in the scope of hospital care management in line with the maintenance of mental health of health professionals in times of pandemic. From the concerns reported by these professionals, it was possible to perceive that mental health initiatives, mainly based on the clarification of the disease, on ensuring access and adequate use of personal protective equipment, in addition to emotional support, have the potential to have a positive effect on the care and maintenance of the health workforce.

New research is suggested in the scope of planning, execution and evaluation of occupational health strategies, which can support the work of health service managers in future pandemic scenarios in Brazil.

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NOTES

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CONFLICT OF INTEREST

There is no conflict of interest.

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