Management and Nursing Education Experiences during the screening of COVID-19 in an Integrated Clinic

Experiencias de gestión y educación en enfermería durante el cribado de COVID-19 en una clínica integrada
Experiências de Gestão e Educação de Enfermagem durante a triagem da COVID-19 em uma Clínica Integrada

ABSTRACT

Objective: to discuss managerial experience and nursing education in the control of COVID-19. Method: report of experience of management and education in nursing, in an integrated school clinic during the return of the activities of the health courses. Result: management of COVID-19 control measures in the clinical screening sectors and contributions to management training in the nursing course emerged as results. The course participated in the implementation of COVID-19 control measures in the institution and the importance of articulating clinical and managerial knowledge was realized, preserving the teaching and learning process of nursing students and ensuring the safety of all in this confrontation of the pandemic. Conclusion: the management of the education of nursing students made it possible to develop their managerial and clinical skills in the face of the scenario, as well as allowing the concrete application of specific instruments that were previously applied only in theory.

ESCRIPTORES: Coronavirus infections; Education; Nursing; Screening; Organization and administration.

RESUMEN

Objetivo: discutir la experiencia gerencial y la formación de enfermería en el control de COVID-19. Método: reporte de experiencia de gestión y educación en enfermería, en una clínica escolar integrada durante el retorno de las actividades de los cursos de salud. Resultado: surgieron como resultados la gestión de las medidas de control de COVID-19 en los sectores de cribado clínico y las contribuciones a la formación gerencial en el curso de enfermería. El curso participó en la implementación de las medidas de control de COVID-19 en la institución y se realizó la importancia de articular el conocimiento clínico y gerencial, preservando el proceso de enseñanza y aprendizaje de los estudiantes de enfermería y velando por la seguridad de todos en este enfrentamiento de la pandemia. Conclusión: la gestión de la formación de los estudiantes de enfermería permitió desarrollar sus habilidades gerenciales y clínicas frente al escenario, además de permitir la aplicación concreta de instrumentos específicos que antes solo se aplicaban en teoría.

DESCRIPTORES: Infecciones por coronavirus; Educación; Enfermería; Poner en pantalla; Organización y administración.

RESUMO


DESCRITORES: Infecções por coronavírus; Educação; Enfermagem; Triagem; Organização e administração.

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DOI: https://doi.org/10.36489/saudecoletiva.2020v10i59p4494-4507
INTRODUCTION

Severe Acute Respiratory Syndrome (SARS) causes mild or severe respiratory infection in humans, affecting mainly people who make up the risk group. In 2019 an outbreak caused by the new coronavirus (SARS-CoV-2) was detected in the city of Wuhan, China, resulting in the disease COVID-19 and resulted in countless deaths. The rapid spread of this virus led the World Health Organization (WHO) to declare a pandemic in 2020.¹

In March 2020, confirmed cases of COVID-19 emerged in Mato Grosso. The epidemiological profile in relation to the number of cases for the month of July shows that 51.5% were female and 48.5% male. Regarding deaths, 59.6% were men and 40.4% women. Of the Municipalities of Baixada Cuiabana, it is noted that Várzea Grande is the second city with the highest number of cases and deaths.²

COVID-19 can present different clinical manifestations, the main symptoms being reported fever (≥37.8°C), cough, fatigue, dyspnoea, malaise and myalgia, some upper respiratory symptoms and gastrointestinal symptoms.³

Such symptoms can be traced through screening. Screening in public health means identifying in a population that has no symptoms, individuals who are at risk of developing a particular health problem and who benefit from further research, immediate preventive or therapeutic actions.⁴

This context brought a series of concerns in society, mainly in the health and education sectors, and it can be said that the management of the practice of professional education in this new scenario is one of the main challenges faced in these fields, not only due to the advance of the virus, but also due to the difficulties pointed out for the massive adoption of control measures and zeal with the quality of training.⁵

It is worth mentioning the importance of organizing the nursing training process according to the health condition and current scenario and that pointed out by SUS, as guided by the National Curriculum Guidelines - DCNs. The professional nurse must be prepared to identify the health situation in order to intervene in the reality presented in order to apply technical and scientific knowledge. The DCNs point out the competences related to management: decision making, communication, leadership, administration, management and permanent education, considered essential for training.⁶

The training of nurses should be permeated by several skills and competences acquired from the experience and interactions that the academic has during the training process, so it is up to the teachers to provide proximity to other professionals and health services, as well as participate in various activities inherent to the nurses’ work process, encouraging them to develop the skills and abilities to organize and coordinate actions, making it possible for the team to act in a planned and efficient way for effective assistance, seeking resolution. It is fundamentally important to manage the unit and care in an integral way, in view of the reality and scenario presented.⁶

With the emergence of COVID-19, there was a need for adjustments in the training of professionals, students and restructuring of health services, seeking to adapt to what was proposed by SUS and the current condition, aiming at organizing teaching and health services adapting to the scenario, adopting control and safety measures for those involved in the process.

It should be noted that the Integrated Clinic, located in the municipality of Várzea Grande, currently serves patients by appointment, in the face of public calls and also those that are regulated by the Unified Health System, being part of the municipality’s care network. Thus, the maintenance of activities in this location was characterized as essential to guarantee the continuity of the health care actions of the popula-
tation that lives mainly in Várzea Grande and in Cuiabá due to its troubled relationship, in reality presented.

Considering that the clinic’s assistance activities are summarily carried out by health courses, it was then necessary to ensure the return of students, teachers and collaborators safely to their academic activities, in order to carry out the necessary assistance continuity and finalize its activities to conclude the academic semester.

Therefore, it was essential that the Clinic adopt an educational management organization aligned with the biosafety measures to control and prevent the spread of the new coronavirus, with the guarantee of the quality of the academic training process in the health area, thus allowing the activities internships are in person and associated with health services with the support of information technologies.

Therefore, a COVID-19 screening service was implemented for all individuals who need to use the clinic’s spaces, which includes the faculty and students, users and other employees of the institution. Thus, the objective of this study is to report the experience of management and nursing education during the COVID-19 screening process for employees and academics of the nursing course in an integrated clinic.

**METHOD**

This is an experience report by a nursing academic from the last semester, coordinator of the integrated clinic and three professors of the undergraduate nursing course at Centro Universitário-UNIVAG in the process of management and education in the control of COVID-19 for the return of face-to-face activities in an Integrated clinic.

The Clinic is located in an annex to the private Higher Education Institution (Instituição de Ensino Superior - IES), in Várzea Grande, it is a school clinic and, in view of the COVID-19 pandemic scenario, it was considered an essential service and therefore had the return of classroom internship activities and professional practices authorized by municipal decree, then developed assistance activities within the courses of medicine, physiotherapy, aesthetics, speech therapy, dentistry, nutrition, psychology and radiology.

In view of the need to develop a COVID-19 control plan that would guarantee the safety of employees, students and the external public when returning from face-to-face activities, the clinic’s nursing management body, together with professors and course coordinators, saw that this could be an activity of the supervised internship II of the undergraduate nursing course since it consisted of management actions in health services, which is consistent with what is provided for in the political pedagogical project of the course for the internship disciplines. In this way, managers, teachers and academics from the last semester developed a plan to control COVID-19, which included the screening of signs and symptoms, guidance and monitoring of institutionally standardized biosafety measures for employees, students, and external audiences and case surveillance suspects carried out only for employees and students. This study is, therefore, about the experience of this process as management and education in nursing.

For the collection of information, participant observation was made and discussions were held between academics, teachers and clinic managers during the process of construction and execution of the COVID-19 control measures plan for the return of the activities of the nursing course and later for the gradual return of the other courses. Therefore, data were collected and analyzed during the following route:

a) Conducting a situational diagnosis, which consisted of analyzing the structure, physical and logistical, to implement the necessary measures to control COVID-19.

b) Implementation of management protocols and instruments, which consisted of the elaboration of a biosafety standards manual, institution and organization of the flow of people and materials on the clinic’s premises, elaboration of an instrument for screening signs and symptoms of patients, employees, students and other audiences external, internal monitoring form of compliance with control measures and surveillance process of suspected cases of COVID-19, the latter being applied only to IES employees and students.

c) Training through realistic simulation and guidance for nursing professors and academics regarding the handling and application of assessment, follow-up and monitoring instruments, after the operationalization of the computerized system.

d) Implementation of the COVID-19 control measures protocols with the academic community (initially in the integrated clinic and later in two other IES blocks), as well as their assessment and procedural update.

The activities started on May 25, 2020 and remain in operation, this experiment was carried out until July 2020 and due to its methodological nature, it does not require the approval of the Committee and Ethics in Research (Comitê e Ética em Pesquisa - CEP) in accordance with resolution 510 / 2016 of the National Health Council (Conselho Nacional de Saúde - CNS), which provides for studies that will not be submitted to CEP.

**RESULTS/ DISCUSSION**

The results of this experience were presented in two categories, proposing to overlap knowledge and articulate experiences: the management of COVID-19 control measures in the clinical screening sectors and contributions to management training in the nursing course.
The management of COVID-19 control measures in the clinic’s screening sectors

The new coronavirus pandemic is a public health emergency. The rapid advance of COVID-19 in the world made clear the need to resort to basic preventive fundamentals, such as hygiene, isolation, quarantine, social distance, traffic restriction and even border closures in some countries, always in order to prevent infection and control its territorial expansion, while seeking more specific solutions such as treatment and vaccine.  

The literature points out that academics are recognized for being potential transmitters of COVID-19 and vulnerable to it when considering possibilities of returning to face-to-face activities. Thus, it is understood that the university is the place where innovation is fostered and creativity must reinvent itself to guarantee the quality of nursing education in times of pandemic. In addition, mobilizing people and technologies to preserve the teaching and learning process, considering that it is in the practice scenario that students develop essential skills for quality teaching. 

Thus, in order to face this pandemic, emergency management actions are required that involve both individual control measures, organization of people management, materials, physical structure since, given the scenario, there was a change in people's behavior in relation to the use of personal protective equipment (PPE) as masks, arising from the scarcity of the product in commerce, as well as the need to reconfigure the physical space, avoiding cross flows between people.  

Considering this, it was then necessary to institute control measures for the return of face-to-face activities at the IES.  

The first control measure instituted was the screening of the signs and symptoms of COVID-19 through the assessment of people’s health condition. The screening sites were installed in the lower and upper reception areas of the Clinic. The upper one was exclusively for screening patients and companions and the lower reception specifically served students, internal or outsourced employees. Tents were set up for this purpose and in order to avoid crowding, people were instructed to keep the distance of 1.5 m according to markings on the floor while waiting in the waiting line to have their health condition assessed. Despite the fact that the screening process took place in all segments of the academic community, this experience is only an inferior reception. It also consisted as a norm the use of handmade mask until the time of the parliament for the exercise of the activity, which took place inside the clinic.  

The health condition was assessed using the system developed for this purpose, based on the instrument developed by the working group, which is divided into five stages, as described below:

1. The first referred to the person, in which it was identified which segment they were part of: Student, employee or external community.  
2. The second was about belonging to the risk group. It was checked whether the person had severe or decompensated heart disease, diabetes mellitus, high-risk pregnancy, immunosuppression, chronic kidney diseases in advanced stage, chromosomal diseases with a state of immune fragility, severe or decompensated lung diseases or whether the person was aged equal or over 60 years.  
3. The third stage referred to the symptomatic verification for COVID-19, then the question was asked whether the individual had signs and symptoms such as dyspnea, tiredness, sore throat, fever, cough, loss or decreased taste / smell, headache, runny nose, diarrhea, nausea or vomiting. In the presence of any of these, reported or evaluated, the time in which they were present and whether they occurred at the time of the evaluation was investigated.  
4. The fourth stage was an epidemiological investigation, for which it was asked whether the person was in any health unit in the last 14 days to treat any of the symptoms questioned in step 3 and whether they had close contact with a suspected, probable or confirmed case of COVID-19 and in this case, the time elapsed from the event was also checked. Heart rate, oxygen saturation and temperature were also assessed, paying attention to the signs of bradycardia or tachycardia, temperature above 37.8 °C and saturation below 95%. After using the devices, the devices were always disinfected for each person served.  
5. This stage corresponded to the classification and conduct. The person who had no signs and symptoms suggestive of COVID-19 and who had not had contact or who had been diagnosed with the disease in the last 14 days was considered released. In addition, when the individual had any of the nonspecific or less common symptoms, such as runny nose, sore throat, headache, among others, a return to activities after 72 hours was advised if the person remained asymptomatic. He was also instructed to seek health care if the less common symptoms of the pathology worsened. Now, the cases in which fever was reported or verified above 37.8°C, associated with another symptom such as sore throat, runny nose, dyspnea, among others, were reported as flu-like syndrome and guided isolation for 14 days from the onset of symptoms. Inside the Clinic, the COVID-19 test was unavailable, therefore, when the individual was a he-

Kawakami, R.M.S.A.; Magalhães, A.O.; Santos, I.L.F.; Santos, M.S.; Santos, F.A.; Management and Nursing Education Experiences during the screening of COVID-19 in an Integrated Clinic
To establish such measures, it was necessary to involve measures that contem- plated the necessary and specific activities for each sector for entering the clinic, at the time the policy of zero adornment, wearing closed shoes and clothing that fully covered the body was oriented.

The second control measure occurred shortly after the person was released, the nursing students then instructed on the importance of hand hygiene and the correct technique, always observing if the information had been understood and organizing the other’s learning process until this became a habit, then guidance was given on how to properly sanitize shoes, another measure adopted at the clinic to reduce the spread of viruses through shoes. At this time, the policy of zero adornment, wearing closed shoes and clothing that fully covered the body was oriented.

The construction of the protocol for control and prevention measures of COVID-19, developed for the exercise of care activities in the integrated clinic, also included a distinct inflow and outflow for employees, students, contractors and patients, as well as adopting a one-way approach with a physical structure that allowed the non-crossing of people who were inside with those who were yet to enter.

To establish such measures, it was necessary for the work team to collect solid scientific evidence to decide which practices would be adopted according to the reality of the service, since it was necessary to involve measures that contemplated the mode of transmission, clinical manifestations and complications and specific control measures, so the most recent scientific recommendations and evidence from official health agencies were used. 10

The nursing course was also responsible for guiding and monitoring compliance and proper execution of the control plan for people who had been released to enter the clinic, so an instrument was built that contained the indicators of the measures adopted in the integrated clinic. The students went through the entire dependence of the clinic analyzing and classifying the compliance with the standards in total, partial or non-compliance. At that moment, guidance work for the norm that was not being fully implemented or was being partially applied in order to raise awareness of people to the importance of engaging in the adoption of such measures to prevent the spread of the new coronavirus.

Also as part of the specific control measures for employees, students and outsourced workers, surveillance of cases considered suspicious was made, which in step 5 of health condition assessment were removed, for 14, 7 or 3 days according to internal protocol. To establish this process, the Ministry of Health’s epidemiological surveillance operationalization process was followed as principles, which establishes, as a function of this activity, data collection, processing, analysis, recommendation of appropriate measures, evaluation of the effectiveness and effectiveness of actions and dissemination of pertinent information. 11

In this way, with the necessary adaptations to the reality of the service, a surveillance instrument was elaborated that allowed, in principle, to verify the profile of absence in the courses and of the employees and later, to provide subsidies to the institution for the management of necessary and specific activities for each follow-up, both during leave and for safe return to activities. Thus, when an employee was removed, communication was made to the immediate manager and when the leave was a student, the course coordination was communicated.

Also as part of the management process of the COVID-19 control measures, the training of other professionals was carried out, which would apply them in other sectors as soon as the other face-to-face activities took place, so explanatory videos and virtual training were made on the protocols built. In addition, explanatory material was also prepared for users about the screening process and the clinic’s operation in the pandemic, which guaranteed the construction of knowledge about the new work process in the clinic, which facilitated the fulfillment of the necessary measures to maintain the activities in a safe way.

From the point of view of experience, it can be said that the nursing course faced great challenges to manage the process of implementing the control measures of COVID-19, mainly in the screening sector for entering the clinic, at this moment it is worth highlighting two critical points for management: people’s resistance to removing ornaments and the decision to remove someone from their activities.

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tion performed, this added to the need to organize hours, wait for screening, hand hygiene and shoe sanitation, generated certain discomfort and resistance among people since it involved a change in habit and routine. On the other hand, the removal of activities, in addition to resistance, involved other sectors such as work safety and the coordination of other courses, since employees would need a medical certificate and students should replace the activity. This required extensive knowledge and use of many nursing management resources.

**Contributions to management training in the nursing course.**

The work conditions and current scenario require management skills from nurses, so it is essential to prepare the professional to act as a leader, an important role in the development of health services, whether public or private at all levels of care. It should provide a favorable environment for the performance of nursing activities, the ability to mobilize society and health conditions. The nurse is an educator, an opinion maker, participates as an agent of change. Therefore, it is necessary to base its actions on scientific evidence that can change reality, share scientifically based information, plausible arguments and propose changes in reality in search of quality and safe care, aiming to minimize health problems. 12

The growing increase in competitiveness in the nurse’s labor market, causes organizations and companies to seek skills and competences in professionals that were previously taken as personal, and therefore neglected, this market reality highlighted the importance of directing nursing training to the development of health management skills by nurses. It also proved to be a great challenge for IESs and needs clarification and discussions about what skills the undergraduate program really offers, which ones the job market wants and which are really necessary to qualify and subsidize professionals in their daily practices. 13

Although five of the six competencies established by the National Curricular Guidelines (Diretrizes Curriculares Nacionais - DCNs) for the nursing course are considered managerial, namely, decision making, communication, leadership, administration, management and permanent education 14 and since the nursing course at UNIVAG has its curriculum in line with the guidelines of the ministry of education, management experiences in practices and internships during graduation are often limited and punctual, which can lead to difficulties in understanding management as a complex and continuous process, as well as the applicability of the knowledge built in the undergraduate course to your life.

Notwithstanding the COVID-19 pandemic, it was possible to guarantee that the management contents provided for in the pedagogical project of the course for supervised internship discipline were fulfilled, the opening of the integrated school clinic provided the opportunity to relate the practice and theory of care contents and managerial. When reflecting on the training of students, it is noted that despite the internship assuming different characteristics from the proposals at the beginning of the school year, before the pandemic, it was possible to conclude the 9th and final semester of the course with successful and significant experiences and in addition, guarantee the population access to different medical specialties and other health professions free of charge.

The experience of managing COVID-19’s control measures in the integrated clinic, then contributed to create the opportunity to experience some management processes in all their stages, allowing learning in real practice the use of management instruments and tools. In this process, students learned to use conflict management, leadership, decision-making, group process and supervision techniques clearly and solidly to manage the COVID-19 control process and thus manage to develop management skills and abilities to ensure the quality and safety of care at the clinic, together with enriching their training.

In this context, the quality of the nursing student’s training has become a challenge for the return of activities during the pandemic, as it is pointed out in the literature that, despite the content guidelines for the formation of managerial skills and abilities, one of the greatest concerns of the graduates, is the difficulty in assuming such functions, presenting restrictions mainly with regard to decision-making and their positioning with the team due to the experience of such processes not having occurred during graduation. 15 Then there is yet another very relevant contribution from this experience, since it enabled the approximation between teaching and service, integration, construction of tools and management processes to act during the pandemic and all this experience favored significant learning about the importance of leadership, of communication, conflict resolution, norm building.

In addition to the management resources already mentioned, it was necessary to mobilize several others, especially with regard to the importance of complying with biosafety measures, making people socially responsible for the measures adopted, and they are protagonists in the process of educating and caring for people who seek care well. as well as their own security, providing the nursing student with the construction of knowledge about the practical applicability of the principles of the National Humanization Policy, which have as guiding values the autonomy and protagonism of the subjects, co-responsibility between them, the establishment of bonds solidarity and collective participation in the management process. 16

In addition to further elaborating and executing permanent education projects, it allowed the experience of learning at work proposed by the National Permanent Education Policy, which is based on meaningful learning that integrates teaching, service and community, allowing for a broad reflection on the work process, self-management, institutional
change and transformation of service practices. 17

CONCLUSION

It is concluded then that the experience was successful both for the control of COVID-19 for the return of face-to-face activities at the IES, and for nursing training. The nursing management and education experiences during the COVID-19 pandemic contributed to articulate teaching-learning, managerial and care strategies that enabled the proper functioning of activities, as well as minimizing the health problems of those involved in the process, allowing people felt safe to develop their activities.

The realization of management and assistance also allowed to mature the necessary skills for a nurse nowadays, thus allowing the experience of practices seen in times of pandemics, in addition, guaranteeing the population the integrity of care, allowing access to the health service, respecting teaching planning, including academies in the proposed activities of management, education and health care.

It also enabled the external public to receive quality and resolving care for their needs in a comprehensive manner through actions to promote, prevent, treat and rehabilitate their health condition.

Thus, it is suggested for educational institutions that yearn to return to their activities in times of pandemic of COVID-19, to plan, implement and implement specific control measures that minimize the possibilities of contagion and those that have the nursing course this activity is your responsibility.

REFERÊNCIAS