

Multiprofessional performance in surgical center: Tensions in the scalpel blade

RESUMO | Objetivo: Compreender as percepções da equipe multiprofissional acerca da assistência cirúrgica em um hospital universitário durante a pandemia da Sars-Cov 2. Método: Pesquisa de abordagem qualitativa de caráter exploratório e descritivo. Os dados foram coletados em um Centro Cirúrgico (CC) norteada por roteiro estruturado, os dados foram organizados e analisados segundo a análise de conteúdo de Bardin. Resultados: Dificuldade na avaliação pré-cirúrgica, mapa equitativo com tempo cirúrgico e rapidez na limpeza das salas cirúrgicas, falha de comunicação entre os membros da equipe e desconhecimento dos Procedimentos Operacionais Padrão. Conclusão: Os profissionais compreendem que as fragilidades impactam diretamente na segurança do paciente, e consideram que há necessidade de ações intersetoriais a fim de alinhar os discursos. A pandemia exacerbou as dificuldades que já existiam em relação ao desconhecimento dos protocolos institucionais e trouxe a necessidade de controle sistemático e continuado dos processos de trabalho.

Descritores: Centro Cirúrgico; Enfermagem; Equipe Multiprofissional; Segurança do paciente; Covid-19.

ABSTRACT | Objective: To understand the perceptions of the multiprofessional team about surgical care in a university hospital during the Sars-Cov2 pandemic. Method: Research with an exploratory and descriptive qualitative approach. Data were collected in a Surgical Center (SC) guided by a structured script, the data were organized and analyzed according to Bardin's content analysis. Results: Difficulty in pre-surgical evaluation, equitable map with surgical time and speed in cleaning operating rooms, lack of communication between team members and lack of knowledge of Standard Operating Procedures. Conclusion: Professionals understand that weaknesses directly impact patient safety, and consider that there is a need for intersectoral actions in order to align discourses. The pandemic exacerbated the difficulties that already existed in relation to the lack of knowledge of institutional protocols and brought the need for systematic and continuous control of work processes.

Keywords: Surgicenters; Nursing; Patient care team; Patient safety; Covid-19

RESUMEN | Objetivo: Comprender las percepciones del equipo multiprofesional sobre la atención quirúrgica en un hospital universitario durante la pandemia del Sars-Cov2. Método: Investigación con enfoque cualitativo exploratorio y descriptivo. Los datos fueron recolectados en un Centro Quirúrgico (SC) guiados por un guión estructurado, los datos fueron organizados y analizados de acuerdo con el análisis de contenido de Bardin. Resultados: Dificultad en la evaluación prequirúrgica, mapa equitativo con el tiempo quirúrgico y rapidez en la limpieza de quirófanos, falta de comunicación entre los miembros del equipo y desconocimiento de los Procedimientos Operativos Estándar. Conclusión: Los profesionales comprenden que las debilidades impactan directamente en la seguridad del paciente, y consideran que existe la necesidad de acciones intersectoriales para alinear los discursos. La pandemia agudizó las dificultades que ya existían en relación al desconocimiento de los protocolos institucionales y trajo la necesidad de un control sistemático y continuo de los procesos de trabajo.

Palabras claves: Centros Quirúrgicos; Enfermería; Grupo de Atención al paciente. Seguridad del paciente; Covid-19

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INTRODUÇÃO

The Surgical Center (SC) is defined as a restricted area next to a set of facilities within the hospital that is intended for the performance of anesthetic-surgical procedures. The operating room has a complex hospital structure, composed of technological components, and a multidisciplinary team with different and numerous work processes and sub-processes, linked, directly or indi-

rectly, to the surgeries.¹ The Brazilian Association of Surgical Center Nurses, Anesthetic Recovery and Material and Sterilization Center points out as a characteristic of the SC, the joint work carried out by several professionals.²

Given the diversity and complexity of the procedures performed, the participation and representation of all workers involved, directly or indirectly, in the articulation of health actions developed in the SC is essential. Studies point to situations that contribute to the cancellation of surgeries and conflicts with the multidisciplinary team, such as precarious material resources, deficient equipment and insufficient instruments in the face of the demand for procedures.³⁻⁴ The cancellation of surgical procedures interferes with the quality of care and increases operational and financial costs, bringing losses to institutions.⁵

In order to minimize losses, the planning of surgical actions is an essential tool, consisting of a set of theoretical, practical and organizational knowledge, which makes it possible to program strategies and necessary actions from a given reality, to achieve the proposed objectives. The systematization of planning allows expanding the analysis of problems and qualifying decision-making processes.⁶ Commonly, this process begins in previous moments, with articulation between the multiprofessional teams, in the outpatient sectors, warehouse sector, Material and Sterilization Center (MSC), linen, wards, Intensive Care Unit, inpatient sector, engineering clinic, in addition to the hospital's purchasing department to provide the permanent material used in the SC.²

Due to the Sars-Cov 2 pandemic, contingency plans were implemented at the national level, such as: surveillance and data management of infected patients and professionals; design and implementation of clinical protocols and workflows; internal communication for all the institution's professionals; training and dissemination of protocols, flows and proper use of personal protective equipment; monitoring of professionals regarding adherence to implemented actions; daily monitoring of pandemic-related supplies; in addition to mechanisms that promote the awareness of the

entire health service team about actions that must be taken to face this pandemic, a contingency plan with strategies and policies necessary to face it, including the management of human and material resources.⁽⁸⁻⁹⁾

Faced with all this complexity that presents itself in the universe of work in a SC, the guiding question of this study was listed: What are the difficulties faced by health professionals working in a surgical center of a university hospital during the Sars-Cov 2 pandemic?

Aiming to understand the perceptions of the multiprofessional team about surgical care in a university hospital during the Sars-Cov 2 pandemic.

METHODS

This is an exploratory and descriptive field research with a qualitative approach, carried out in a SC of a university hospital in the city of Rio de Janeiro. Professionals working in the operating room and Surveillance and Patient Safety who provide support to the SC took part in the study. Inclusion criteria: professionals belonging to the CC multidisciplinary team and those from the CC support sectors who were present at the institution during the data collection period from September to November 2021, and that after being aware of the research, they agreed to participate, having signed the free and informed consent form. Those absent during the data collection period, due to absence, vacation or time off

were excluded.

09 professionals were interviewed, who were identified by the use of acronyms and numbers that indicate the category of the professional interviewed, aiming to preserve their anonymity. For the category of nurses, the acronym "NUR" was used, for nursing technicians, the acronym "NUR TEC", surgeons, "SUR", anesthesiologists, "ANEST", for those responsible for the support sectors, the acronym "SUP" being followed by numbers relative to the order in which the interviews were carried out.

As for the profession of the interviewees, there were 3 doctors, 2 nurses, 2 nursing technicians and 2 nurses who are in the SC support service.

As for the age group, it is observed that there is a slight predominance of the age group from 30 to 50 years old, 1 anesthesiologist aged 52 years old, 1 surgeon aged 66 years old, and 1 nursing technician aged 70 years old.

The education level of all medical professionals is postgraduate. Nursing technicians have high school education. The nurses of the SC, 1 is graduated and 1 is master. Nurses working in the support sectors are at the undergraduate level. The working time at the institution ranged from 9 months to 35 years.

The researchers carried out the interviews during the day and night, using the current work schedule in the sector as a reference to identify and invite professionals to participate

Table 1: Profile of the multidisciplinary team, 2021.

Category	Age	Occupation	Education	Working time at the institution
ANEST1	52	Anesthesiologist	Specialist	19 years
SUP 1	38	Nurse	Graduation	09 months
SUP 2	41	Nurse	Graduation	14 years
SUR 1	66	Physician	PhD	30 years
SUR 2	47	Physician	Post-doc	22 years
NUR1	31	Nurse	Graduation	04 years
NUR 2	45	Nurse	Master	18 years
NUR TEC 1	35	Nursing technician	High School	02 years
NUR TEC 2	70	Nursing technician	High School	35 years

Source: Data collected by the authors (2021).

in the study. Data collection took place in a reserved place in the SC. The instrument used for data collection consisted of items intended for the characterization of the participant and a structured interview script, prepared with thirteen guiding questions.

The responses obtained were recorded on a voice recorder and fully transcribed after exhaustive listening. Data processing took place through content analysis proposed by Bardin. The data collection step is carried out until theoretical saturation occurs, that is, until repetition or absence of new data occurs.

The ethical aspects of the research were met as determined by Resolution No. 466/2012. This research was evaluated and approved by the Research Ethics Committee, under opinion nº 4.869.373 and Certificate of Presentation for Ethical Appreciation (CAAE): 47949721.3.0000.5258.

RESULTS

The results obtained in the interviews resulted in five categories, namely:

Category 1: Weakness of pre-surgical assessment as a factor for suspending surgeries

In the SC researched, the factor that most professionals had to suspend surgeries was the lack of preoperative care, expressed in the following reports:

Suspension of surgeries occurs because there is no outpatient preoperative nursing office (NUR 2).

Suspensions are frequent because there is no team that evaluates this patient after passing through the IRN (Internal Regulation Nucleus), to check exams, what type of surgery, guidelines at the outpatient clinic (NUR TEC 2).

There would be less suspension if we had a check on some things that are very important for surgery the day before, such as blood, material, it could be outpatient (NUR 1).

A equipe multidisciplinar a questão do médico antecipar os cuidados pré operatórios no ambulatório, iria dirimir as suspensões (NUR TEC 1).

Certainly, better patient preparation at the outpatient clinic would resolve most of the suspensions (SUR 1).

Outpatient pre-anesthetic evaluation would help to resolve suspensions between 24 to 48 hours before the surgical procedure (SUR 2).

There is a lack of prior guidance to the patient to prevent surgical suspension, who are often misguided in relation to medications, fasting, exams etc... (ANEST1).

Category 2: Equitable map management with surgical time and quick cleaning to reduce idleness in operating rooms

The multidisciplinary team emphasizes that a surgical map needs to be consistent with the surgical time and the need for cleaning the operating rooms to be carried out more quickly, to reduce the idleness of the rooms.

Making a functional map according to the surgical time improves the performance of the team, there is a lack of planning. (NUR TEC 1)

And the issue is also that we have a graph of the surgical time and make a map consistent with this time, that is to manage properly (NUR 2).

Faster cleaning between surgeries would generate fluidity in the map, we do not know the cleaning time. (SUR 1)

What I realize is that we could have more agility in changing patients, this takes a while. In my personal experience, this has already been much worse, agility in changing

patients and pulling surgeries more quickly. Whether because of stretcher bearers, room cleaning, it doesn't matter, I don't know where the problem is, I don't have data about it to plan (SUR 2)

The difficulty in assistance would be to have a quick cleaning, because sometimes they take a long time. Because you call the patient right away, we (anesthetist) even take the patient to the room, but cleaning takes half an hour or more. (ANEST 1)

Category 3: Lack of communication between the members of the multidisciplinary team and between the sectors that support the SC

The fragility of verbal communication between the multidisciplinary team proved to be a factor that directly impacts the service.

Communication could be better today, it is very poor, little. Failure to communicate information. Anesthesia will place the patient in the room and first have to have the OK of the professional who is within the sector in relation to the material conference. (NUR TEC 1)

There is no effective communication, it is not a team, it is a group. Most professionals working within the SC are groups of anesthesiologists. (SUP 1)

So we also have communication difficulties due to the non-involvement of all teams. The chief medical officer responsible for the patient had to be involved and not just the resident who is up front pulling it. And we report to the resident. We have great difficulty with the staff being the owner of the patient, today it is the resident who runs after the owner of the patient because he wants to operate. (NUR 1)

I think that communication failure occurs more with surgeons, anesthesiologists and nurses. The surgeon because he often runs over the anesthesiologist or runs over the nursing staff. Then it gets confused. Who works as a team, is the nursing within the SC. (NUR TEC 2)

Too bad we had an example now because you say something to one and that thing is not passed on to the team members. So communication doesn't flow very well and we don't have pre-established protocols, each one thinks that the protocol is one, so this is a lot of work and a lot of confusion. (NUR 2).

Communication could be better, there are still map changes and we don't know at CME what happens, this could be communicated as well as feedback regarding inappropriate material, material breakage so we can replace, these are essential [...] (SUP 2)

Intersectoral communication was identified as disharmonious, bringing harm to the relational and professional nature among team members.

I don't think we communicate well across sectors, bad freezing sector, CME, videos, always with problems. (SUR 1).

Intersectoral communication is difficult. Communication between professional categories, as there are many clinics, each one does it in a different way, there is omission of information, so we need to standardize. (SUR 1)

Communication with the laboratory is very difficult, there is a lot of noise, they do not understand each other, because you are here

at night and you have to take the blood gas analysis to the sector, the exams take a long time if there is a rush, on weekends we are worse because there are few and nursing is very overloaded (ANEST1).

It's bad during the day, worse at night, stretcher bearers are bad, cleaning is bad, lab doesn't exist, you have to run the lab, blood gas analysis at night is crazy, there's no communication. (NUR TEC 1)

There is a big problem that is after 4 pm that you cannot go to the laboratory because there is no one to get a blood gas analysis you have to take it there, this is very bad for the professional who has to stop caring for the patient to perform a procedure that is to take, who could be the forwarder (NUR 1)

Terribly, the sectors that we have the most difficulty in interacting and communicating with the ICC, at night, because when we take the patient and another team, and the day team doesn't pass the case and they say we don't pass, misinterpretation, everything [...]. Sometimes with the cleaning and waste management staff, we have a problem even within the sector, which they do not come to solve. Even the CME issue, which is a sector of the SC, should be more united, it also has this separation and division. (NUR 2)

Category 4: Ignorance of SOPs and protocols as a risk factor for patient safety

There are reports of lack of knowledge and non-adherence to institutional SOPs by the professionals interviewed, as follows:

Yes I believe it has. They do not adhere because they do not know. (SUR 1)

I currently know it at the institution. I think there are 8 on the internet, at least 2 that don't match because of the update. Professionals do not adhere because they do not know. (NUR 2)

I don't see any here, I've seen them in other places, but here I don't know them. They don't adhere because they don't have a copy. Today professionals are adhering to these SOPs that are now arriving. They do not adhere because they do not know, lack of knowledge (NUR TEC 1)

Few are developing this, a year ago there was no protocol. We are starting to organize now, and developing. Professionals sometimes adhere, and acceptance of the protocol is difficult for us, people are a little apprehensive, this is an indicator of quality. Sometimes they are too lazy to read, otherwise it would be better, although we discuss and change the protocol, they think it hampers the services, the protocol. So sometimes we have difficulty developing the protocol, and sometimes following that protocol. (SUR 2)

When I got here, we didn't have it. And we are promoting this, but it is difficult. Most professionals do not know. (SUP 1)

I think that professionals do not adhere to the protocols, they are even unaware, because they do not have information. (NUR TEC 2)

More or less I don't know much about Pops and Protocols. I know there are protocols, but I forget because it is sporadic. I didn't know you have the WIK platform to access these protocols. They don't join the Pops because they really

don't know. Often puts this on the back of the nurse, to know what to do. (ANEST 1)

Category 5: Difficulty in implementing Covid 19 surgery protocols

Just as the fragility in the operationalization of the general SOPs of the SC was reported, the same mode of difficulty in the implementation of the Covid-19 surgery protocols followed, as reported below:

I didn't see much difference in what we do, I looked for the Covid surgery protocols but there's nothing in the system [...] if my technician asks me for the protocol I don't have it. (NUR 2)

I have not received training for the Covid surgery protocol. (NUR TEC 2)

I was not trained for covid protocol on my return from leave. I would feel safe to care for a patient with positive covid, bringing the life experience of before working with a patient who is potentially contaminated, but knowing that it was better to have this daily training (NUR 1)

DISCUSSION

The COVID-19 pandemic has made it imperative that surgical procedures need to have well-defined indication and execution criteria, so attention to preoperative care is paramount. The purpose of any surgical procedure is to have a satisfactory result, but for this, the preoperative evaluation of the patient is essential, with emphasis on a detailed anamnesis and a well-executed physical examination, which can be performed by a preoperative nursing visit.¹⁰

A study highlights the implementation of the preoperative visit during the pandemic and reports that the patient who received the nurse's visit is better informed about the surgical procedures and care related to the new co-

ronavirus, in addition to alleviating the stress of hospitalization, which facilitated the work of the trans and postoperative nursing team.¹¹

Carrying out the map, preoperative assessment and patient confirmation were identified as planning strategies to reduce the number of surgeries being suspended, in addition to shorter hospital stays.¹² The factors listed by the interviewees in relation to the idleness of the rooms would be the adequacy of the surgical map to the surgical time, with this it is pos-



The Sars-Cov2 pandemic exacerbated the difficulties that previously existed in relation to the lack of knowledge of institutional protocols and brought the urgent need for systematic and continuous control of work processes



sible to dimension the correct use of the operating rooms and the scheduled procedures.⁵

Another factor of surgical delay is the delay in the turnover time, which is comprised between the departure of a patient from the operating room until the entry of the next, in this period, cleaning time is included. A study showed that the average turnover time was 27 minutes, of which 10 minutes were used for cleaning.¹³

Effective communication between mem-

bers of the surgical team provides direct benefits to the patient, highlighting the importance of intersectoral communication at the time of transfer as a form of safety for the patient and the team that assists him/her.¹⁴ Encouraging effective communication provides safe practices, which favors trust between team members and humanization with patients.¹⁵

The need to curb distortions in professional practice is fundamental for this, the use of SOPs is an indispensable condition as it allows standardized care and greater safety in the performance of techniques with a focus on improving user care.¹⁶ The training of SOPs should not be decontextualized from the service, as it is premised on the active participation of team professionals due to the educational nature of the action, in addition to being a process of permanent and continuous education.¹⁷

Since the knowledge of this technology promotes the transformations, the necessary changes, which aim to improve the quality of care and the minimum risk for the user. The difficulties related to the lack of knowledge of the reported SOPs permeate a work of recognition of the importance of the continuous development of processes of permanent education in their professional practice with the intention of bringing cost benefits, term, quality of services, dynamics of the service, satisfaction and safety of those performing the tasks and especially the satisfaction of the assistance provided to the user and his family.¹⁸

The issue of the lack of knowledge of the SOPs of Covid surgeries, marked as one of the weaknesses, is serious, and important, being also related to the lack of training in SOPs. Protocol-based care is seen as a mechanism to facilitate professional health practice with a view to standardizing care.¹⁸

CONCLUSION

The professionals of the multidisciplinary team understand that certain weaknesses in SC care directly impact patient safety, and consider that there is a need for intersectoral actions in order to align discourses.

Inadequate preoperative assessment directly impacts safe care in the SC, but there

is a consensus that certain care practices tend to reduce this problem. The idleness or occupation of operating rooms not consistent with the workload of health professionals is directly related to a well-planned and operative surgical map within a proposed period of time for elective surgeries.

The cleaning of the operating rooms, cited as time consuming, denotes the importance of controlling turnover by the SC management, in order to promote agility in this process, ensuring greater productivity of the unit and customer satisfaction.

Poor communication between the professionals of the multidisciplinary and intersectoral team was cited as a factor of dissatisfaction by all. In the hospital where this research

was carried out, the Safe Surgery Saves Lives Program was recently implemented in August 2021, through the checklist instrument, to promote communication between team members.

The Sars-Cov2 pandemic exacerbated the difficulties that previously existed in relation to the lack of knowledge of institutional protocols and brought the urgent need for systematic and continuous control of work processes, in order to prevent adverse effects caused by non-compliance with SOPs.

Even taking place in locu, the training did not guarantee the participation of all professionals, especially because it took place in a punctual way, requiring efforts to meet this demand. The educational process should not

be understood as a punctual exercise, but as a continuous action, a fact that did not occur in this reality. The post-implementation evaluation by the institutional permanent education service is important.

The return to normality of elective surgical procedures requires strict adherence to institutional and governmental health care protocols and exclusive and segregated flows within the institution, named Covid Free flow.

The pandemic exacerbated the difficulties that already existed in relation to the lack of knowledge of institutional protocols and brought the need for systematic and continuous control of work processes.

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