The intraoperative surgical context. Appreciations from a group of patients and from the nursing team

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Objective. To interpret the experience of being unconscious or alert from a group of patients during the surgical act and appreciations from the members of the nursing team on the same context. Methodology. Qualitative study focusing on grounded theory. Information was collected through a) observation and b) interviews to 20 patients, 19 nursing aides, and 8 nursing professionals who work in level II surgical centers in Valle de Aburrá, Colombia. Results. From being aware of everything to being at the mercy of another, during the intraoperative, the patient goes through different states of conscience, which means being subjected to total care. Instead, for the nursing personnel the same context implies different behavior going between two environments: the “scenario” – when in front of the patient awake, which involves measured and diplomatic behavior; or, “behind the scenes” – with the person under the effects of anesthesia – the behavior is more free and uninhibited. Conclusion. The intraoperative surgical context is different for patients and for the nursing team. However, it is necessary to bear in mind that they are caring for a human being who requires respect, dignified treatment, and that care must be promoted under an ethical perspective.

Key words: operating room nursing; patients; surgical procedures, operative; unconsciousness.
Introduction

The surgical service is the place where surgical procedures are performed; it must comply with a series of requirements for these to be carried out with maximum security, efficiency, and efficacy. For nursing professionals, this service is another context of care and a specialized area of their practice, where they are additionally fundamental team members. Their function is to provide nursing care for the surgical patient during the phases of preoperative, intraoperative, and postoperative, requiring sufficient knowledge, skills, and attitudes, inasmuch as they plan, manage, and evaluate nursing care founded on interactions established with the patient and the context in which these take place. It should be highlighted that nursing care within this setting bears special importance in the patient’s behavioral, cognitive, and emotional processes.1
Investigations carried out during the perioperative period address themes like roles, decision making, significance of perioperative nursing, care practices, perceptions of satisfaction, and quality of care and on the preparation of patients for the surgical procedure. Some researchers describe experience lived during the practice, and others, evaluate how patient care is developed in the institutions where they work.

Most of these studies show nursing care based on the biomedical, administrative model and on the hierarchy of nursing. Patients’ views regarding their experiences in the operating room are poor, given that their transit therein is under the effects of anesthesia or under sedation. Likewise, the surgical service is a geographically isolated zone and little known by not only patients, but also by the personnel in the institution. Due to this, there was a need to inquire on what was the meaning given by the nursing team and patients to care interactions during the perioperative period. The aim of this research was to describe, analyze, and interpret care interactions between the nursing team and patient during the perioperative period within the context of the surgical center.

Twelve categories emerged from this investigation (desiring normality; feeling ambivalence: between fear and tranquility; being willing to care; working and being in a different area; making me feel at home; informing and informing me, complying with nursing rituals; being aware of everything and everyone; waking up different; from feeling ignored to unique; feeling satisfied, and, from being aware of everything to being at the mercy of another. This article mentions the last category for the purpose of interpreting the experience of being alert or unconscious by a group of patients during the surgical act and the appreciations from the members of the nursing team.

**Methodology**

A qualitative study was performed from the perspective of grounded theory. The methodology was developed from symbolic interactionism, given that it permits understanding from within the social subjects, interacting with the social players, and assigning meanings to the world around us.

The participants were 20 patients from elective surgery (10 women and 10 men) who had been surgically intervened (7 under general anesthesia, 11 under spinal anesthesia, and 2 under local anesthesia), who fulfilled the selection criteria of: being older than 18 years of age, not having neurological deficit or serious communication problems, and that their recovery occurred in the postsurgical unit or recovery service. The nursing team was comprised of 27 people (26 women and one man); regarding educational level, 12 were nursing aides, seven nursing technicians, and eight nursing professionals – one of them a Specialist and the other with a Masters degree. All complied with the selection criterion of having at least one-year experience in the surgical service.

Data collection took place through semi-structured interview and observation. The questions guiding the interviews of the patients inquired on the experience of nursing care they received during the perioperative period in the surgical service, while interviews of the nursing team centered on the care interactions with the patient during the surgical process.

The observations were made in the surgical centers of two level II hospitals in the Metropolitan Area of Valle de Aburrá, Antioquia, Colombia. Immersion in the field permitted knowing the participants that could collaborate in the study, clearing specific aspects of the interview, and observing care interactions during the perioperative period.

Data analysis was performed manually using a computer and following the theoretical framework of the grounded theory. After carefully reading the interviews, these were coded into three indissoluble moments: 1st open coding: where an exact transcription of the interviews was made and the line-by-line coding of the information described; then, these were thoroughly examined and compared to detect differences and similarities, and live codes and nouns were used to give rise to categories and subcategories; 2nd axial coding: process in which the categories are related with their subcategories.
to generate more precise and complete explanations on the phenomena studied. Axial coding occurred around the core of a category, categories were linked regarding their properties and dimensions, and it was noted how they intertwined and linked. Each category represented a phenomenon, a problem, an issue, a happening, or a significant event for the participants; and: 3rd selective coding: once the information was categorized and coded, we proceeded to partially recomposing the data. During this stage, the different categories that emerged and were considered relevant were selected, as they responded to the study question. The emerging categories were validated with the data.

Ethical considerations during the study were: informed written consent was obtained, respect for dignity, protection of rights, confidentiality of information, and anonymity of the participants by using seudonims. Additionally, the study was approved by the Graduate Ethics Committee of the Faculty of Nursing at Universidad Nacional de Colombia, Bogotá branch, and by the Scientific Committees at the hospital institutions where the investigation took place.

To ensure rigor during the research process, the principles of qualitative research were followed. Bearing in mind that this research studied an iterative process, the researcher evaluated the relationship between the design and implementation to ensure congruence among the question, strategies of data collection, analysis, and literature. Also, data were verified systematically, maintaining the focus and adjusting the information to the conceptual structure of the analysis, by monitoring the interpretation and constantly confirming such. Profound familiarization was maintained with the data and the emic and etic points of view were contrasted with annotations containing comments after the interview. Additionally, the findings were confronted with the literature, specifying the criteria constructed by the researcher, how and why were the study participants selected; the research approach was outlined in terms of the sample and the environment, and the relationship of the literature with each category was described. Also, surveillance was kept on the methodological coherence, the theoretical sampling, saturation, and active analytic stance.

All this helped to maintain the direction of the analysis and ensure the rigor of the study.

Results

As mentioned in previous paragraphs; herein, allusion is made to the category: from being aware of everything to being at the mercy of another, emerging from the experiences shared by the participants.

Being aware of everything during surgery. This subcategory refers to everything the patient participants felt, experienced, and heard during the surgical procedure. For many of them, being awake during this moment was traumatic; thus, they expressed it: (...) my husband says he heard when they were cutting him and that he felt when the skin was being torn; so tell me: one is alive, feeling all that, how are you not going to be nervous, and I am very nervous... oh merciful Jesus! (...) When I saw that I was stiff from here down, I got scared, I was thinking: they are going to leave me awake, no! I said, I am not capable of seeing anything (...) (Carlota, patient).

These are some of the sensations and perceptions shared by the participants who were subjected to conductive anesthesia and who remained conscious during surgery: (...) they were pulling me, I felt they were pulling on that vein, it did not hurt me ... I felt they were moving my leg here and there, they were working on it and I felt those clips, do you know where I clearly felt them without pain? here [pointing to the popliteal region], in this tiny knot I felt them a lot, and here I felt them as if they were several at the same time. I felt how they organized my leg, that is, how they all ran for you (Débora, patient); and: I felt they burnt my fallopian tubes and the pain was awesome, very annoying (Débora, patient).

Others, instead, did not see it so, they simply remember the conversations of the surgical team: I heard the physician who was operating...
on me, who was asking for plate with six holes, five screws, three of one size and two of another (Ricardo, patient); and: They talked about a trip they had taken, that another one had gone on another trip, another man – I think he was the anesthesiologist – said he had gone to some nice lakes (Adolfo, patient).

For the nursing personnel, patients under the effects of spinal anesthesia are conscious, participate in the surgical act, and must have everything explained: (...) if it is a spinal, you have to explain to the patient, he is another person there and you cannot do things over him (...) (Paulina, nurse). Patients who are conscious during surgery must be considered subjects; a condition that, additionally, requires being discrete with them, as noted in these comments: Given that the patient's eyes are open, we must be careful with any comments, with things insinuated in the operating room because patients with spinal are participants in the operation (...) (Paulina, nurse), and: It may not be with the nursing care, but a bit of discretion with what is said in front of the patient who is not completely asleep (...) (Catalina, nursing aide).

For some of the members of the nursing team, the only variation in care is that caution must be exercised with what is said in front of the patient. However, for others, conscious patients require greater dedication, whenever it is necessary to interact with them during the surgical procedure: (...) those with general [general anesthesia] are at our mercy, those with spinal are not totally, because they listen, see, and hear, some are pre-medicated; I think it is uncomfortable for them to hear because they might listen to conversations, among the personnel, from the instrumentalist, which they do not understand. Some surgeons try to socialize with the patient: hey, you have such a thing. Sometimes, it is very difficult for us because there are very fast surgeries, then you do not know who to pay attention to, given that the instrumentalist speaks to them, the anesthesiologist speaks to them (...) (Violeta, nursing aide).

Being at the mercy of another: “forgetting it all". Patients cannot relate to the surgical team, commenting that since the preparation for surgery they lost contact with reality: (...) as soon as we crossed the operating room I lost memory… until recovery, when the lady said: we are here, the trip is over; everything is ready. That was quick, hours pass in a matter of minutes; you could practically die in one of those things and you are not aware of anything (...) (Julián, patient).

Others remember a bit more until anesthesia was begun: (...) that is what is good about surgery: you go in, the time they take to give you the first sedative, because then you are no longer aware of anything (...) (Matías, patient), and: (...) that i show you die, you are not even aware, I fell asleep and I do not know if they even moved the stretcher. Like you sometimes see on TV that the patient sees where they are taking him; I was not aware of anything (...) I remember when they told me to lie down that they were going to inject a drug to put me to sleep and I looked up and saw the little bottle hanging and there I staid and there I awoke (Virgilio, patient).

For participants in the nursing team, patients under the effects of general anesthesia require total care are directly under their responsibility, as noted by one of their comments: With general anesthesia, patients are helpless; at that moment they depend on the anesthesiologist and on the staff in the operating room and on a machine, which is providing the anesthesia (...) (Elvira, Nursing aide).

Under these conditions of vulnerability, patients require dignified treatment; here, team ethics come into play: (...) it is just a matter of being quite honest with what you do with them because they are at your mercy and that is very delicate; they are subjected to what you are going to do or to what the surgical team will do to them; you may pipe a vein, you can do what you want to do to them; they let you because at that moment they are totally at your mercy (...) (Violeta, nursing aide).

Discussion

During the perioperative period, the patient goes through different states of conscience, from being
alert, conscious of what they see, feel and hear to being unconscious; that is, dependent on another. According to the nature of the surgery and the characteristics of the patient, it is necessary, prior to the surgical act, to administer one of the different types of anesthesia that seek to produce different responses in the human being. General anesthesia is characterized by unconsciousness, local anesthesia by the loss of sensitivity of a small zone of the body, and the conductive anesthesia that produces a nervous or plexus blockage and, hence, anesthesia in a broader section of the body. The last three share the fact that patients can be conscious or only under the effects of sedation, which means a depressed state of conscience in which the individual maintains reflexes and response to stimuli.

During this time, and while the intervention lasts, patients are under the care of the surgical team. Nevertheless, it is worth mentioning that the nursing personnel finds differences in the two types of patients: those from general anesthesia are patients who are at the mercy of the nurses and of the surgical team, while those receiving local or conductive anesthesia are patients who are aware of everything occurring during their surgery.

Many of the episodes of the co-presence of the nursing team and their patients, during the intraoperative, occur in silence, given that the patients are asleep or heavily doped and cannot offer the version of what is happening. This is a world the silence of the bodies becomes the central part because they are not communicated. Patients are in a vulnerable position, without being able to relate to the surgical team.

A matter to keep in mind by the surgical team is the patient’s preference for the type of anesthesia, because some of them prefer to be conscious, while for others it is the contrary. Hence, it is necessary for the anesthesiologist with the patient to decide on the most convenient type of anesthesia. When for some motive, patients arrive at the operating room without pre-anesthesia evaluation, nursing must contact the patient with the anesthesiologist, so this matter does not become a cause for stress for the individual during the procedure, and that, on the contrary, becomes an opportunity to offer the patient some tranquility and security.

Another important aspect mentioned by the participants from the nursing team is that related to the behavior of the surgical team during the intraoperative, which must change according to the anesthesia the patients are receiving; in other words: the type of anesthesia defines the behavior guidelines in front of the patient.

Certain behaviors by the surgical team and from nursing can be explained through an analogy with the work: The presentation of self in everyday life by Goffman. The author states that we are all actors during different moments of everyday life, and on how to keep the façade that is expected of us during particular situations. Goffman uses a whole arsenal of terms from the world of theater: action takes place on stage, which conditions in great part the work. There are different behavioral guidelines in a church or in a discotheque; likewise, within the surgical service or outside it. The work is prepared on the scene.

On stage, or when in public, the individual tries to manage impressions to produce reactions on the audience or to show previously selected information on the self as a social player. Likewise, expressed by Mead in Blumer, the self has an I and a me: one spontaneous and creative, and another conventional, conscious, and elaborate. On the set, there are less impressive experiences of oneself; individuals rehearse the management of their impressions because they do not see it, carry out plans and reflections on their representations on present and past scenarios. There are behaviors that include calling the patient by the given name or the nickname, cooperative decision making, bad words, sarcastic comments, open sexual observations, complaints, yelling, games, aggressive jokes, humming, and whistling among many other things.

The staff’s behavior during surgery, especially during the intraoperative phase, is strongly founded on what Goffman calls “behind the scenes”; in part, because of their physical location inside the hospital, given that surgery is an area of limited access and patients, family members, and most
of the personnel are restricted from this zone. This is a private environment and conduct of the physicians and of the nursing team is different to that assumed in other wards where the patients are conscious.

In the operating room, patients are presents, but most of them are anesthetized or under the effects of sedatives and, hence, cannot see or hear what is happening around them. This predisposes a clandestine setting, where the members of the surgical team allow themselves to speak, act, and interact without the prejudice with which they would do so in other scenarios within the hospital institution. It is under these conditions when the personnel working during surgery manifest many of the behaviors suggested by Goffman and referenced by Tanner and Timmons\textsuperscript{26} like non-professional and non-thoughtful conversations that show the perception it has regarding the surgery as an environment free of censorship. A participant described it thus during an informal interview in one of the surgical centers: (…) surgery is the service where more vulgarity and nonsense is spoken, where there is more stress, and where more is learnt ... (Observation, February 15, 2007).

Also, anesthesia and sedation affect the patient’s ability to relate and interact with others, and do so totally dependent on the surgical team and on nursing.\textsuperscript{28} Due to this, during the intraoperative there is little communication with the patient; although, such is reestablished once the surgery is over and consciousness is recovered; it is the moment to tell the patient of his/her status, some of the details of the operation, or of the physiological aspects and prognosis.\textsuperscript{24}

However, during the states of dependence, as those provoked by anesthesia and sedation, the individual continues needing attention, although kept from requesting such because of the functional limitations imposed by his/her status. The aforementioned agrees with Orem’s self-care deficit theory, cited by Fawcett,\textsuperscript{29} who defines it as a relationship between the agency of self-care, similar to the capacities or limitations, and the demands of self-care, which are the equivalent to the necessities. Thereby, it is more appropriate to state that the self-care deficit – as a relationship between the limitations of the activity and the needs in all the bio-psychosocial aspects – is an attribute of dependency care.

According to Orem,\textsuperscript{28} the self-care deficit requires compensatory actions from the nursing team. These actions respond to the necessities that are normally satisfied by self-care activities and which would be unnecessary if the individual did not suffer the consequences of the functional limitations.

In the operating room and during the intraoperative, one of the most important compensatory actions is the ethics of the nursing team when comprehensively caring for the patient, not only from the biological dimension but from the social, psychological, and spiritual dimensions. Dignified and respectful treatment must be offered to the person who is unconscious or strongly sedated. Responsibility commits the nursing team to comply with an eminently moral contract in which concern must exist for the good of others.\textsuperscript{30}

The parting point is the nursing team working in an operating room, implying responsibly accepting to care for patients and this is founded on two implicit premises: the first is that nursing professionals have the necessary knowledge to satisfy the patient’s needs; and the second, that said knowledge will be used at all times for the patient’s benefit and safety. Thereby, we have the start of a relationship based on the trust the patient deposits on the nursing team. The gap between patient vulnerability and the nursing team’s knowledge is closed during the act of caregiving.\textsuperscript{31}

The conclusion of this study is that the intraoperative surgical context is different for patients and for the nursing team. However, it is necessary to bear in mind that they are caring for a human being who demands respect and dignified treatment and that care must be promoted under an ethical perspective.

References