



# Interpersonal relationships in the surgical unit from the perspective of nursing workers: an exploratory study

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# ABSTRACT

Objective: to identify how nursing workers perceive interpersonal relationships established within the multiprofessional team working in a surgical center. Method: qualitative, descriptive and exploratory study conducted in the surgical center of a large university hospital located in Recife, Pernambuco, Brazil. Twenty-five nursing workers participated in the study through semi-structured interviews. Content thematic analysis was used to treat the data. Results: three thematic categories emerged, namely: Conception of interpersonal relationships; Factors that negatively impact interpersonal relationships; and Attitudes and practices that strengthen interpersonal relationships. Conclusion: reflecting upon the interpersonal relationships established among the workers in the surgical center can provide tools for managers to establish coping strategies and ensure a harmonious work environment to favor integral, humanized and safe care for patients in critical conditions.

Descriptors: Perioperative nursing; Working Environment; Interpersonal Relations.

### INTRODUCTION

A surgical center is characterized by managerial activities, instrumental care and direct care, which are determinant for building a base that sustains the care provided to patients<sup>(1)</sup>. It is a sector in which nursing activities are directed to the management of aseptic techniques, preparation of operating rooms for surgical procedures, assistance with surgical instruments, direct actions performed with patients, as well as bureaucratic and managerial tasks<sup>(1,2)</sup>.

Given the characteristics of surgical centers, social interaction within the care context is sometimes restricted. The relational environment may be tense, conflictive, lead to the disintegration of effort, and relational problems among staff members<sup>(3)</sup>, though it may also lead to affection, attachment and care, a context in which freedom of expression contributes to a harmonious and pleasant environment, enabling cooperative work with positive feedback among the team's members, improving the team's credibility and recognition, as well as improving working conditions<sup>(4,5)</sup>.

The scientific literature addressing interpersonal relationships in the health work environment highlight the presence of hierarchical and vertical relationships among the different health workers, resulting in a lack of appreciation for nursing professionals, in addition to poor working conditions, inadequate remuneration, increased work hours, all of which added to the stressful nature of health services. Such factors end up impacting the relationships within the staff, consequently affecting the quality of care delivered to patients, as well as the psychological wellbeing of workers<sup>(2,6,7,8)</sup>.

Work can play a positive role when it favors acknowledgment and valorization in the social sphere, leading to professional satisfaction; however, work can also generate psychological distress and dissatisfaction<sup>(6,9)</sup>. There are situations in which nursing workers experience interpersonal relationships that lead to dissatisfaction<sup>(9)</sup>.

Therefore, understanding how interpersonal relationships take place within surgical centers is essential to establishing goals that, if met, will improve relationships and the delivery of nursing care. Given the previous discussion, this study's objective is to identify how nursing workers perceive the interpersonal relationships established by the multiprofessional team of a surgical center.

#### **METHODS**

This is a qualitative, descriptive and exploratory study in which data were collected in the surgical center of a university hospital located in Recife, PE, Brazil. The unit's physical structure includes seven surgical rooms. There is a multiprofessional team composed of nine nurses, nine nursing technicians, 28 nursing auxiliaries, two administrative assistants, two receptionists, four scrub nurses, three orderlies, one employee responsible for sterilizing purging, eight anesthesiologists, and 31 surgeons from various specialties. All those from the nursing staff working in this unit for at least one year, the time necessary to have the minimum experience with the unit's routine, were invited to participate in the study. Four out the 40 eligible nursing workers participated in the pretest of the data collection instrument and 25 nursing workers from both day and night shifts participated in the data collection. Theoretical saturation of data was the strategy used in sampling<sup>(10)</sup>.

Data were collected through recorded

individual semi-structured interviews held from March to May 2015. The script included sociodemographic characterizations and the following guiding guestions: What do you understand by interpersonal relationships? How do you perceive interpersonal relationships to take place within the multiprofessional team in the surgical center? Do the relationships you have with the people who work directly with you impact with your work? In the face of adverse situations that take place in the environment of the surgical center involving people, what strategies do you use to improve your relationships with the unit's other professionals? Can you highlight what you consider important to having a good relationship with those who work with you?

The reports were transcribed verbatim without altering their meanings, only making orthographic and grammatical corrections. Data were analyzed using thematic content analysis<sup>(11)</sup>, which is organized in three stages. The first is an exhaustive and comprehensive reading of the material to have an overview of the entire material. The second stage included exploration of the material and identification of the core meanings, which were grouped according to comparable themes in categories and subcategories. At this point, Atlas.ti (version 7.0) was used in the coding process and to determine the core meanings. Afterwards, a redaction was developed based on theme in order to make sense of the meanings found. In the analysis' final stage, an interpretative synthesis was developed and compared to the findings reported by the literature in the field.

The study was approved by the Institutional Review Board at the Federal University of Pernambuco, Health Sciences Research Center (CAAE 38572314.7.0000.5208). The interviews were conducted in a private room only after the participants signed free and informed consent forms. The participants were ensured their identities would remain confidential, so they are identified in the study by codes composed of three letters that correspond to their profession and the number that corresponded to the order in which they were interviewed.

### RESULTS

A total of 25 nursing workers participated in the study. Their characteristics are presented in Tables 1 and 2.

**Table 1** - Sociodemographic characteristicsof nursing professionals. 2015. Recife – PE.

CHARACTERISTICS	Ν
SEX	
Female	22
Male	03
MARITAL STATUS	
Single	09
Married/Stable union	14
Divorced	02
RELIGION	
Catholic	10
Protestant	07
Spiritist	02
Others	06
FAMILY INCOE	
4 to 6 times the minimum wage*	13
More than 6 times the minimum wage*	12
*Minimum wage: R\$788.00 a month	
Source: authors' source, 2015.	

Table 2 - Professional characteristics of the professionals participating in the study. 2015. Recife – PE.

CHARACTERISTICS	N
CATEGORY	
Nurse	03
Nursing technician	09
Nursing auxiliary	13

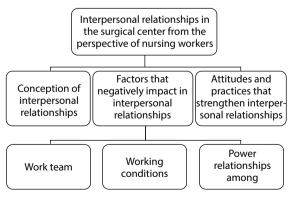
SCHOOLING	
High school	08
College	06
Specialization	11
WORK SHIFT	
Daytime	22
Nighttime	02
Both	01
NUMBER OF JOBS	
One	13
Two	12

Source: authors' source, 2015.

Most of the participants attended college or a specialization program, even those hired as a nursing technician or nursing auxiliary. The participants' ages ranged from 32 to 62 years old. In regard to experience in years working as a nursing worker, the shortest experience was of three years and the longest 35 years. In regard to the time working in the surgical center of the hospital where the study was conducted, the shortest period was one year and six months and the longest was 34 years.

The categorization process resulted in three thematic categories composed of content presented in the chart.

**Organizational chart** - Presentation of content that composed the categories and subcategories. 2015. Recife-PE.



Source: authors' source, 2015.

Category: Conception regarding interpersonal relationships

In this category, nursing professionals conceptualize interpersonal relationships as relationships held among people in everyday life, having personal and/or professional bonds. Specifically in regard to the surgical center, the study's participants believe that these relationships should work toward the best functioning of the surgical center, considering the exchange of information among team members.

> I think it is the relationship between two people, especially in relation to socialization, either positive or negative. (TEC 09)

It's an acquaintance with other people with or without bonds. (AUX 01)

It would be the relationship we establish and maintain within the work environment, professionally speaking. All professionals are part of the surgical center as scrub nurses, orderlies, nurses, physicians or residents. So, all these relationships involve these professionals in favor of the unit's maintenance and functioning. (TEC 01)

# Category: Factors that negatively impact in interpersonal relationships

Factors that negatively impact in the interpersonal relationships within the surgical center were included in this category. These factors are related to the work team; working conditions; and power relationships among the professions.

In this context, one of the aspects identified as being a negative factor of the work team is related to communication difficulties within the nursing staff, between the nursing staff and the management and/or hierarchical superiors, and with workers from the remaining professions. Impaired communication is one aspect that makes the work routine difficult and wearisome. Disunity generated by impaired communication creates obstacles in everyday life leading to authoritative behaviors.

> I think there is always communication noise because one never says clearly what one wants. (TEC 01)

> It would be good if there were more unity, understanding on the part of the nursing staff, greater agreement between each other; that would flow very well. (TEC 09)

> There are impositions, if you do not like it, you either leave or go to another unit. (AUX 03)

In regard to the working conditions in the surgical center, the participants reported aspects such as the performance of activities in a way that imposes greater overload on workers in order to ensure surgical procedures are performed. This is a factor that negatively influences the relationships among the nursing team members.

> In the surgical center, there are no established breaks to have a snack, have lunch; I guess that if we had a moment to really take a break, it'd improve the quality of relationships. There are times demands; too many, as if we were machines, but we are humans. It is harming our rela

tionships, wearing people out; people are getting tired of being treated this way. (AUX 07)

Additionally, the participants mentioned the hospital's and the unit's structural issues. They mentioned that these also negatively affect the relationships among the health workers, because a lack of inputs that are important for the proper performance of tasks is presented as an aggravating factor.

> Sometimes the relationships here in the unit are a little stressful because of difficulties we face, especially due to a lack of material during surgeries; there may be some stress because of it, and it's wearisome sometimes. (AUX 09)

Other content in the interviewees' reports involves power relations among the different professions in the surgical center. These refer to the implicit existence of a hierarchy that results in conflicting situations in everyday work, in which the nursing profession appears to be in submission to the medical profession.

> I perceive that relationships are very conflicting; there is the need to manage power, as if nursing was a profession aside from, it is seen as a profession that is submissive to the medical profession. It seems that the medical team believes we need to answer to them. As if we were submissive to medicine and not to the nursing head. So I see this issue a little bit, a battle of egos in the relationship between bosses, in relation to the subordinates, that is, us. (TEC 01)

There is a conflict that creates a barrier for nursing; there are disagreements within the nursing profession itself (nurses, nursing technicians and auxiliaries) and between the surgeons and anesthesiologists, too, so I guess that nursing is in the middle of a conflict. (Nurse 02)

## Category: Attitudes and practices that strengthen interpersonal relationships

When we ask what they considered essential to improving relationships in the unit, the nursing technicians and nursing auxiliaries reported that decision-making should include the collective as a way to achieve an impersonal nature in the management of the process and, consequently, optimize interpersonal relationships in the nursing staff. To establish decision-making that involves the collective, certain elements should be taken into account, such as: attentive listening based on dialogue, respect toward co-workers, and the involvement of the staff in promoting unity

> You have to talk to and listen to the person who is causing a problem or who has a problem so you give the person a chance to improve. I guess a good relationship is based on an honest dialogue. (AUX 02)

> I think we have to respect all people regardless of your position. (TEC 07)

You have to be involved with the staff and show that I'm a nurse but we are in this together. (Nurse 01)

Weigh decisions, try to decide together with the group, rather than making individual decisions, because sometimes I'll have an attitude that may be good for me but not good for the group. (Nurse 02)

Nursing technicians and auxiliaries also report the needs within the service that need to be met to strengthen the relationship within the team. These individuals also mentioned the need for continuing education addressing technical-scientific aspects of the nursing work in the unit and also the very issue concerning the relationships established among the workers in the team. Another need reported refers to the incorporation of regular meetings involving the entire nursing staff to discuss the service problems in an attempt to solve these problems and minimize stress related to interpersonal relationships.

> There should be continuing education for all the services. But education addressing not only technical issues, but also address the workers as a team, trying to engage the team. So, it would really improve relationships if there were a continuing education process. (TEC 04)

> Here in the surgical unit, we almost never have meetings to discuss problems but whenever there is a meeting, there are so many problems to discuss. There are no meetings so information is lost. (AUX 03)

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# DISCUSSION

Various fields of knowledge have addressed phenomena related to the world of work and relationships between human beings and organizations. Such an understanding is permeated by a complex context that requires linking the social, political and economic context and the subjective relationships individuals establish among themselves and with work<sup>(5)</sup>. The complexity of hierarchical tasks that involve the nursing staff require different skills that involve relational, technical--scientific and managerial skills<sup>(12)</sup>.

The concept of an interpersonal system alludes to the interaction of individuals, while the different types of communication that can optimize learning and dynamism among individuals stand out<sup>(13)</sup>. This study's findings are in agreement with this concept because the participants report that this interaction involves some type of coexistence based on personal or professional bonds, while weak or poor interpersonal relationships may lead to friction and difficulties among nursing workers, possibly compromising the quality of care provided to surgical patients<sup>(14)</sup>.

The study's participants reported some factors that negatively impact interpersonal relationships. Such factors are related to the work team, working conditions, and power relationships among the various professions.

In regard to the work team, this study shows that impaired communication leads to an exhausting environment, which in turn can lead to vertical decision-making. These results are in agreement with those reported by the literature, showing that when information is either broken or changed, it may worsen communication and harm health care-related work<sup>(14)</sup>. Therefore, communication is key for the proper development of teamwork; that is, it can be either a factor of disaggregation or aggregation, depending on how it occurs. Communication is also an essential tool to obtaining valuable information with the purpose of guiding therapies<sup>(15)</sup>. Group strategies are necessary to reduce communication noise within the nursing staff, which will positively influence care delivery.

Therefore, health work has to be organized in such a way to overcome vertical hierarchy, authoritarianism, and excessive standardization, characteristics that focus on the work at the expense of the workers<sup>(7,8)</sup>.

When one analyzes the working conditions in the surgical unit, the work overload, which the nursing workers report exists to ensure surgical procedures are performed, emerges as a negative factor for interpersonal relationships. This work overload corroborates one finding that shows that very high productivity presented by the nursing staff in surgical centers may indicate a high level of overload that affects both the workers' quality of life and the safety of care delivery<sup>(16)</sup>.

In regard to the relationships established among the different professionals in the surgical unit, the participants report a hierarchy in which nursing workers rank the lowest. It is known that the organizational values of an institution guide the behavior of workers, standards and ways of working. In Brazil, health institutions are process- and work-oriented, presenting rigid structures, centralization of power, and communication problems, which result in traditional management models, which are then detrimental to relationships and establish an unfavorable environment for workers<sup>(7)</sup>.

Organizational problems are coupled with relational aspects such as power, autonomy, and recognition and belonging processes that take place in the daily experience

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of a multiprofessional work context. While multidisciplinary work in the health field is an indispensible reality, it also implies challenges in recognizing others and their importance for the whole unit<sup>(8)</sup>. Fragmentation in the health field reinforces professional isolation and discourages greater efforts being made to bring recognition to the profession; however, it cannot undermine the team's ability to take co-workers into account and to acknowledge the importance of all parties to the final outcome, which is quality care delivery.

The professionals addressed in this research project recognize strategies that can strengthen interpersonal relationships because these strategies affect the collective dimension of work. In order to strengthen the group as a whole, decision-making should involve all the participants in the process through attentive listening. One should understand that interaction among workers depends on recognizing different points of view and the legitimacy of such points of view<sup>(17)</sup>.

It is important to establish effective communication ties without the imposition of others, noise or barriers among professionals to avoid conflict and contradictions in information regarding the health-disease continuum and any negative action in the context of nursing care with the potential to pose a risk to care delivery<sup>(14)</sup>. Teams who work satisfactorily can determine strategies to improve communication and teamwork.

In regard the needs of the service, the participants suggest decision-making be shared by the collective through periodic meetings with the surgical unit's staff, considering the opinion of the collective. These findings are in agreement with the results reported in the literature, as they show the importance of understanding the elements that permeate interpersonal relationships among the nursing workers in order to improve communicative and managerial skills, enabling competencies to be acquired to better deal with people<sup>(14)</sup>. Group meetings in the context of a surgical unit can be a strategy for the nursing head to better understand the context experienced by other team members, learning about the difficulties they face in regard to the nursing staff itself and in regard to workers from other professions, strengthening relationships.

The professionals mentioned the importance of implementing permanent health education, bringing to light aspects concerning interpersonal relationships in order to strengthen them. It is in this context, therefore, that training and assessment of the work process occurs, as implemented by the National Policy of Permanent Health Education (PNEPS), the purpose of which is to connect academic training and the world of work, in which learning and teaching are incorporated into the work routine of organizations<sup>(18)</sup>. Therefore, the incorporation of continuing education as a pedagogical practice is implemented in the routine of health work as a central focus, leading to self-analysis and self-management<sup>(19,20,21)</sup>. The inclusion of continuing education assumptions is valuable when dealing with problems in a work routine and when discussing ways in which work relationships can be improved.

### CONCLUSION

Nursing workers, as members of multiprofessional teams working in surgical units, play an essential role in the development of surgical procedures, as well in providing care to critical patients. The professional relationships established in the hospital setting should favor a harmonious environment. The surgical unit

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is an area with specific characteristics that are ripe for the emergence of conflicting interpersonal relationships when providing care to patients in critical conditions.

The hierarchical and institutionalized power of the hospital-centered model negatively impacts and compromises listening and dialogue within the multiprofessional team, generating dissatisfaction, especially among technicians.

Assigning blame for the lack of equipment and material, which is a consequence of structural and financial problems affecting public health, is a common situation that wears out relationships in the work environment. Involving the entire multiprofessional team in the solution of needs and demands in order to provide quality health care to individuals and families in the perioperative period is a strategy that empowers the defense of the interests of patients covered by the SUS.

It is essential that managers appropriate the relationships established in the surgical unit in order to enable a harmonious environment, valuing all the staff members in order to achieve the final goal, which is the delivery of humanized care.

The factors that may negatively impact the interpersonal relationship of the multiprofessional team in the nursing work performed in the surgical unit include impaired communication characterized by vertical hierarchy and an overload of tasks and responsibilities that require prompt responses.

The reports of the professionals that compose the nursing team propose actions that can contribute to quality interpersonal relationships being established in the work environment, such as attentive listening and dialogue, promoted by regular participatory meetings and workshops enabling integration and socialization to establish problem-solving strategies. The purpose of these measures is to provide tools for the collective decision-making process and also to develop continuing education actions to promote the potential of human capital concerning how to relate to each other and function in a work environment.

This study's limitations include the fact it does not involve other workers from the multiprofessional team working in the surgical unit, which would enable a deeper investigation of interpersonal relationships, a fact that suggests further research is needed to broaden understanding on this topic.

### REFERENCES

- Pereira FCC, Bonfada D, Valença CN, Miranda FAN, Germano RM. Compreensão de enfermeiros de centro cirúrgico a respeito do seu processo de trabalho. R. pesq. cuid. fundam. [Internet]. 2013 Mar [acesso 2014 out 21];5(1):3251-58. Disponível em:http://www. seer.unirio.br/index.php/cuidadofundamental/article/view/1879/pdf\_675
- Schmidt DRC, Dantas RAS, Marziale MHP. Ansiedade e depressão entre profissionais de enfermagem que atuam em blocos cirúrgicos. Rev Esc Enferm USP. 2011;45(2):487-93.
- Ferla JBS. Ênfase nas relações interpessoais na formação do enfermeiro sob o paradigma ético-humanista. Trab. Educ. Saúde. 2015:11(3);633-657.
- Serra MAAO, Filho FFS, Albuquerque AO, Santos CAA, Carvalho Junior FA, Silva RA.Nursing Care in the Immediate Postoperative Period: A Cross-sectional Study. Online braz j nurs [internet] 2015 Mar [cited 2017 jun 05]; 14 (2):161-7. Available from: http://www.objnursing.uff.br/ index.php/nursing/article/view/5082
- Jungblut A. Contratos psicológicos no trabalho: aspectos teóricos. Revista EDUICEP. 2015; 1(1):1-18.

- Hilleshein EF, Souza LM, Lautert L, Paz AP, Catalan VM, Meíra Gonçalves Teixeira MG, Mello DB. Capacidade para o trabalho de enfermeiros de um hospital universitário. Rev Gaúcha Enferm. 2011;32(3):509-15.
- Rocha FLR, Marziale MHP, Carvalho MC, Id SFC, Campos MCT. A cultura organizacional de um hospital público brasileiro. Rev Esc Enferm USP. 2014;48(2):308-14.
- Silva EM, Moreira MCN. Health team: negotiations and limits of autonomy, belonging and the acknowledgement of others. Ciência & Saúde Coletiva. 2015;20(10):3033-3042.
- Kessler AI, Krug SBF. Do prazer ao sofrimento no trabalho da enfermagem: o discurso dos trabalhadores. Rev Gaúcha Enferm. 2012;33(1):49-55.
- Fontanella BJB, Ricas J. Turato ER. Amostragem por saturação em pesquisas qualitativas em saúde: contribuições teóricas. Cad. Saúde Pública. 2008;24(1):17-27.
- Gomes R. Análise e interpretação de dados de pesquisa qualitativa. In: Minayo MCS. Pesquisa social: teoria, método e criatividade. Petrópolis: Editora Vozes; 2011. p. 79-108.
- Izu M, Silvino ZN, Cortez EA. Working ability of a hospital nursing team: a correlational study. Online braz j nurs [internet] 2016 Dec [cited 2017 jun 06]; 15 (4):655-663. Available from: http://www.objnursing.uff.br/index.php/nursing/ article/view/5393
- 13. King IM. Toward a theory for nursing: systems, concepts, process. 1st ed. NewYork, USA: Delmar Thomson Learning; 1981. 181p.
- Broca PV, Ferreira MA. Processo de comunicação na equipe de enfermagem fundamentado no diálogo entre Berlo e King. Esc Anna Nery. 2015;19(3):467-474.
- 15. Almeida RT, Ciosak SI. Communication between the elderly person and the Family Health Team: is there integrality? Rev. Latino-Am. En-

fermagem [Internet]. 2013 Jul [cited 2015 dez 19];21(4):[7 screens]. Available from: http:// www.scielo.br/pdf/rlae/v21n4/pt\_0104-1169rlae-21-04-0884.pdf

- 16. Possari JF, Gaidzinski RR, Lima AFC, Fugulin FMT, Herdman TH. Use of the nursing intervention classification for identifying the workload of a nursing team in a surgical center. Rev. Latino-Am. Enfermagem. 2015;23(5):781-8.
- Miranda L, Rivera FJU, Artmann E. Trabalho em equipe interdisciplinar de saúde como um espaço de reconhecimento: contribuições da teoria de Axel Honneth. Physis. 2012; 22(2):1563-1568.
- 18. Ministério da Saúde. Portaria n. 198/GM, de 13 de fevereiro de 2004 (BR). Institui a Política Nacional de Educação Permanente em Saúde como estratégia do Sistema Único de Saúde para a formação e o desenvolvimento de trabalhadores para o setor e dá outras providências. Brasília, DF: Ministério da Saúde. 13 fev 2004.
- Barth PO, Aires M, Santos JLG, Ramos FRS. Educação permanente em saúde: concepções e práticas de enfermeiros de unidades básicas de saúde. Rev. Eletr. Enf. [Internet]. 2014 Jul [acesso 20 jan 2016];16(3):604-11. Available from: http://dx.doi.org/10.5216/ree. v16i3.22020.
- Salles RS, Corvino MPF, Gouvea MV. Continuing education and quality in a public hospital: a descriptive study. Online brazj nurs [internet] 2015 Mar [cited 2016 mar 09]; 14(3):248-54. Available from: http://www.objnursing.uff.br/ index.php/nursing/article/ view/4589
- Yamamoto TS, Machado MTC, Silva Junior AG. Educação permanente em saúde como prática avaliativa amistosa à integralidade em Teresópolis, Rio de Janeiro. Trab. Educ. Saúde. 2015;13(3): 617-637.

All authors participated in the phases of this publication in one or more of the following steps, in according to the recommendations of the International Committee of Medical Journal Editors (ICMJE, 2013): (a) substantial involvement in the planning or preparation of the manuscript or in the collection, analysis or interpretation of data; (b) preparation of the manuscript or conducting critical revision of intellectual content; (c) approval of the version submitted of this manuscript. All authors declare for the appropriate purposes that the responsibilities related to all aspects of the manuscript submitted to OBJN are yours. They ensure that issues related to the accuracy or integrity of any part of the article were properly investigated and resolved. Therefore, they exempt the OBJN of any participation whatsoever in any imbroglios concerning the content under consideration. All authors declare that they have no conflict of interest of financial or personal nature concerning this manuscript which may influence the writing and/or interpretation of the findings. This statement has been digitally signed by all authors as recommended by the ICMJE, whose model is available in http://www.objnursing.uff.br/normas/DUDE\_eng\_13-06-2013.pdf

Received: 03/24/2016 Revised: 06/22/2017 Approved: 06/22/2017