








PROFESSIONAL SATISFACTION AND WORK ENVIRONMENT OF THE NURSING TEAM IN INTENSIVE CARE UNITS

SATISFAÇÃO PROFISSIONAL E AMBIENTE DE TRABALHO DA EQUIPE DE ENFERMAGEM EM UNIDADES DE TERAPIA INTENSIVA

SATISFACCIÓN PROFESIONAL Y AMBIENTE LABORAL DEL EQUIPO DE ENFERMERÍA EN UNIDADES DE TERAPIA INTENSIVA

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ABSTRACT

Objectives: to verify the association between the work environment and the professional satisfaction of Nursing workers by type of intensive care unit: adult and child. **Method:** a cross-sectional and analytical study. It was performed with Nursing professionals (n=226) from intensive care units of three general hospitals (H1, H2 and H3) in Paraná, Brazil. To measure job satisfaction, the validated Brazilian version of the Index of Work Satisfaction was used, and to extract the Nursing team's perception of the work environment, the validated Brazilian version of the Nursing Work Index-Revised was chosen. After the tabulated data, a descriptive and inferential statistical analysis was performed. **Results:** overall, the teams from all hospitals and units reported a good satisfaction and perception about their work environments. The statistically significant differences regarding job satisfaction were as follows: worse remuneration domain in the child ICU in H2 (p-value=0.035); and interaction and nurse-physician interaction domain with higher (worse) mean values in the adult ICU in H3 (p-values=0.036 and 0.011, respectively). Regarding the work environment, there was a higher mean (worse environment) in the adult ICU in H3 for the physician-nurse relationship domain (p-value=0.023). There was no statistical significance in the comparison of the work environment scores for the other institutions. **Conclusion:** the teams were satisfied with their work and positively evaluated their practice environment. However, some punctual differences between the adult and child ICUs may be considered for more assertive management strategies, especially regarding relational aspects in the adult ICU from the public hospital.

Keywords: Job Satisfaction; Working Environment; Nursing, Team; Quality Management; Intensive Care Units.

RESUMO

Objetivo: verificar a associação do ambiente de trabalho e da satisfação profissional de trabalhadores de Enfermagem pelo tipo de unidade de terapia intensiva, adulto e infantil. **Método:** estudo transversal e analítico. Foi realizado com profissionais de Enfermagem (n=226) de unidades de terapia intensiva de três hospitais (H1, H2 e H3) gerais do Paraná, Brasil. Para mensuração da satisfação profissional, utilizou-se a versão brasileira validada do Index of Work Satisfaction e, para extrair a percepção da equipe de Enfermagem sobre o ambiente de trabalho, utilizou-se a versão brasileira validada do Nursing Work Index-Revised. Após os dados tabulados procedeu-se à análise estatística descritiva e inferencial. **Resultados:** de forma geral, as equipes de todos os hospitais e unidades referiram boa satisfação e percepção sobre ambiente de trabalho. As diferenças estatisticamente significativas a respeito da satisfação profissional foram as seguintes: domínio remuneração pior na UTI infantil em H2 (p-valor=0,035); e domínio interação e interação enfermeiro-médico com médias superiores (piores) na UTI adulto em H3 (p-valor=0,036 e 0,011, respectivamente). Acerca do ambiente de trabalho, houve média superior (pior ambiente) na UTI adulto em H3 para o domínio relação médico-enfermeiro (p-valor=0,023). Não houve significância estatística na comparação dos escores sobre o ambiente de trabalho para as demais instituições. **Conclusão:** as equipes estavam satisfeitas com o trabalho e avaliaram positivamente o seu ambiente de prática. Contudo,

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algumas diferenças pontuais entre as UTIs adulto e infantil podem ser consideradas para estratégias gerenciais mais assertivas, principalmente sobre aspectos relacionais na UTI adulto do hospital público.

Palavras-chave: Satisfação no Emprego; Ambiente de Trabalho; Equipe de Enfermagem; Gestão da Qualidade; Unidades de Terapia Intensiva.

RESUMEN

Objetivo: verificar la asociación del entorno laboral y de la satisfacción profesional de los trabajadores de enfermería por tipo de unidad de cuidados intensivos, adulto e infantil. **Método:** estudio transversal y analítico llevado a cabo con profesionales de enfermería ($n = 226$) de unidades de cuidados intensivos de tres hospitales generales (H1, H2 y H3) de Paraná, Brasil. Para medir la satisfacción laboral se utilizó la versión brasileña validada del Índice de Satisfacción Laboral, y para extraer la percepción del equipo de enfermería del entorno laboral se utilizó la versión brasileña validada del Índice de Trabajo de Enfermería-Revisado. Después de la tabulación de datos, se realizó un análisis estadístico descriptivo e inferencial. **Resultados:** en general, los equipos de todos los hospitales y unidades informaron buena satisfacción y percepción sobre el entorno laboral. Las diferencias estadísticamente significativas con respecto a la satisfacción laboral fueron las siguientes: dominio salario peor en la UCI infantil en H2 (valor $p = 0,035$); dominio interacción entre el enfermero y el médico promedios más altos (peores) en la UCI de adultos en H3 (valor $p = 0,036$ y $0,011$, respectivamente). Con respecto al ambiente de trabajo, hubo un promedio más alto (peor ambiente) en la UCI de adultos en H3 para el dominio de relación médico-enfermero (valor $p = 0,023$). No hubo significación estadística en la comparación de las puntuaciones del entorno laboral para las otras instituciones. **Conclusión:** los equipos quedaron satisfechos con el trabajo y evaluaron positivamente su entorno de práctica. Sin embargo, se pueden considerar algunas diferencias puntuales entre las UCI de adultos y niños para estrategias de manejo más asertivas, especialmente con respecto a los aspectos relacionales en la UCI de adultos del hospital público.

Palabras clave: Satisfacción en el Trabajo; Ambiente de Trabajo; Grupo de Enfermería; Gestión de la Calidad; Unidades de Cuidados Intensivos.

INTRODUCTION

In order to minimize the risk of patient injury, qualify care and optimize the use of material and financial resources, national and international health organizations have invested in actions to improve patient safety.¹ In this context, the implementation of institutional protocols, the permanent education of the team and the execution of activities that favor clients and professionals satisfaction are considered relevant strategies.²

Regarding job satisfaction, it is perceived as a fundamental element of performance evaluation and a great indicator of organizational results, as it reflects workers' perceptions of their work.^{2,3} In addition, job satisfaction can influence professional performance, because this phenomenon knowledge is associated with personal fulfillment and work quality.¹

In Nursing, team satisfaction corresponds to the professionals' perception about the work they perform and the environment in which it is produced. Thus, it has the potential

to affect the care provided.⁴ Different definitions for job satisfaction are found in the literature, but the most frequent one is related to the synonym of motivation as attitude or as a positive emotional state about work.^{5,6}

From job satisfaction, directly or indirectly, there is a need to improve practice scenarios based on management strategies to improve work processes and safe interaction with the patient.⁷ This is because such a feeling may impact, albeit indirectly, on health care-related costs, such as increased absence from work and inattention to procedures, also compromising patient safety.

It should be noted that conditions for the professional Nursing practice at the technical level, such as physical structure, work process, proper sizing, efficient communication, good interpersonal relationship and participative management, as well as contributing to the reduction of burnout rates, absenteeism and turn over, raise the level of satisfaction of the professional with the work.⁸

Nevertheless, there is a relationship between job satisfaction and work environment among the Nursing professionals who perform care activities, which are understood as direct care. Intensive Care Units (ICUs) require from their staff high technical-scientific level, skill, speed of clinical reasoning, complex interventions and, tied to the rigidity of care protocols and the high risk of patient mortality, these can result in stress with a compromised quality of life of its professionals.^{4,9}

Evidence regarding the peculiarities of the work process in adult ICUs and pediatric/child ICUs is available in the literature, especially studies addressing professional suffering, stress, workload and burnout.^{10,11} However, there is a lack of comparative studies aiming to contextualize the relationship between the public attended in the ICU profile, job satisfaction and work environment conditions.

Due to the explained scenario, it is considered that investigations about job satisfaction and work environment are scientifically and socially relevant, because these themes permeate a feasible bridge for the improvement of the team's working conditions. Thus, this study is based on the following question: how are professional satisfaction and the perception of Nursing professionals about the work environment in adult and child ICUs presented? Is there any difference regarding the type of unit? Thus, the objective was to verify the association between the work environment and the professional satisfaction of Nursing workers by the type of intensive care unit: adult and child.

METHOD

A cross-sectional and analytical study with a quantitative approach. It was performed in the Intensive Care Units (ICUs) of three hospitals located in the inland of state of Paraná, Brazil. All the hospitals were classified as medium-sized general

hospitals, two were private and one public. These institutions were randomly coded as H1, H2 and H3.

The study population consisted of Nursing professionals who worked in the ICUs of the three hospital institutions, distributed between adult ICU and child ICU. The adult ICU group represented the units that allocated adult patients, regardless of whether they were from general or specialized units, such as oncologic or coronary. The child ICU group included pediatric and/or neonatal units.

Sample size calculation was based on the population of these units, provided by the immediate management of the sectors or direction of the hospital Nursing service. Stratified sampling was performed, with a significance level of 95% and a sampling error of 5%, respecting the ICU group (adult and child) and professional category (nurses and mid-level professionals) strata in each hospital.

As an inclusion criterion, workers who had worked at the institution for at least six months were selected. For sample calculation, the total number (H1=107; H2=80; H3=117) of professionals working in each institution was considered. From this total, the sample segmented the number of mid-level (Nursing technicians) and higher-level (nurses) professionals, as well as distributing the population in adult ICU and child ICU.

The stratified sample sizing and the distribution of the number of professionals recruited in sampling for each of the institutions was as follows:

- **H1:** 16 nurses (eight in adult ICU and eight in child ICU) and 66 Nursing technicians (34 in adult ICU and 32 in child ICU);
- **H2:** 13 nurses (eight in adult ICU and five in child ICU) and 46 Nursing technicians (30 in adult ICU and 16 in child ICU);
- **H3:** 18 nurses (nine in adult ICU and nine in child ICU) and 65 Nursing technicians (35 in adult ICU and 30 in child ICU).

During the data collection procedure, the participants were randomly approached for convenience until reaching or exceeding the sample size of each stratum by hospital. After signing the Free and Informed Consent Form, the questionnaires were applied.

Data collection took place between December 2016 and March 2017. As data collection instruments, besides a sociodemographic characterization form, elaborated for the purposes of this study, two instruments validated for Brazil were used.

To measure job satisfaction, the validated Brazilian version of the Index of Work Satisfaction (IWS) was used, known as the job satisfaction index (*Índice de Satisfação Profissional, ISP*). The instrument consists of two parts (I and II). Part I is composed of 15 items of sociodemographic and labor worker characterization. In Part II two sub-items (A and B) are contemplated. Subitem A contains six domains of job satisfaction: autonomy; interaction;

professional status; job requirements; organizational standards and compensation, which are verified by paired comparison. In Subitem B, a scale is distributed that contains 44 items that refer to the six satisfaction domains, verified in a Likert gradation (one: "total agreement" to seven: "total disagreement"). Therefore, in this study, the lower the score, the better was the interpretation of job satisfaction, with no reversal of score.³ Only part B of the ISP and part I, corresponding to the sociodemographic and labor characterization of the health team, were used due to the extension of the instrument.

The Nursing team's perception on the work environment was measured by the validated Brazilian version of the Nursing Work Index-Revised (B-NWI-R), which evaluates the characteristics of the work environment that favor or not the practice of Nursing.^{12,13} B-NWI-R consists of 15 items in four subscales: autonomy; control over the environment; relationship between doctors and nurses; and organizational support. The items are evaluated on a four-point Likert scale, which results in scores for each subscale: the lower the score, the higher the favorable attributes in the work environment.^{13,14}

Data was tabulated in spreadsheets and submitted to descriptive and inferential statistical analysis using the Statistical Package for the Social Sciences (SPSS) software, version 21. In the analysis procedures, Nursing professionals and Nursing technicians were considered a single population, since the intention of the study was to compare the type of unit, not the professional category.

In the descriptive analysis of the sociodemographic data, the measures of mean, standard deviation and percentage were presented. In the data inferential analysis from part B of the IST and B-NWI-R, the Student's t-test was used to compare mean satisfaction and working environment by type of ICU, as well as descriptive analysis with central and dispersion trend measures. In all the inferential analyses the significance level was 5%, expressed as p-value ≤ 0.05 .

The ethical principles governing research on human beings were fully respected, and the project was approved under Institutional Opinion N° 1,788,249/2016, nationally registered by CAAE: 58571216.4.0000.0104.

RESULTS

The study included 226 Nursing professionals, 56 (24.8%) nurses and 170 (75.2%) Nursing technicians or assistants, with a predominance of females (n=199; 88.0%). The mean age of the survey participants for the H1, H2 and H3 institutions was 36 years old (± 8.6 years old), 30 years old (± 8.4 years old) and 39 years old (± 8.0 years old), respectively.

Regarding the type of ICU, 101 (44.6%) Nursing professionals worked in child units and 125 (55.4%) in adult units. The mean

working time in the unit, in years, was 6.3 (± 4.7); 3.4 (± 3.7) and 7.4 (± 5.4) for hospitals H1, H2 and H3, in that order.

When asked about the motivation to work in the ICU, the majority (127; 56.2%) of the professionals reported opting for this workplace due to the specific characteristics of the sector itself, followed by internal relocation due to the need for the service (52; 23.0%) and lack of vacancies in other sectors (13; 5.8%).

Regarding job satisfaction, 220 (97.3%) professionals reported being satisfied with their work. In addition, 128 (56.6%) reported having benefits such as health insurance; seven (3.1%) had dental care; 14 (6.2%) received benefits related to education/day care and 11 (4.9%) had a private pension linked to the institution.

Table 1 shows the mean scores for the ISP domains obtained in the adult and child ICUs of the three hospital institutions. At institution H1, the ISP domain scores did not differ significantly (p-value > 0.05) between adult ICU and child ICU. In H2, a p-value of 0.035 was observed in the remuneration domain, with a higher mean in the child ICU. In hospital H3, a p-value of 0.036 was found in the interaction domain and of 0.011 in the doctor-nurse interaction with higher means in the adult ICU.

Table 1 - Comparison of the professional satisfaction of the Nursing staff between the adult ICUs and child ICUs of three hospitals in the inland of Paraná. Paraná - Brazil, 2017 (n=226)

| | Child ICU | | Adult ICU | | p-value** |
|--------------------------|-------------|--------------|-------------|--------------|--------------|
| | Mean | SD | Mean | SD | |
| H1 | | | | | |
| Remuneration | 3,63 | 1,081 | 3,28 | 1,002 | 0,140 |
| Professional status | 2,62 | 0,879 | 2,53 | 0,905 | 0,667 |
| Autonomy | 3,45 | 1,281 | 3,73 | 0,837 | 0,279 |
| Organizational standards | 3,36 | 0,973 | 3,30 | 0,896 | 0,774 |
| Work requirements | 3,91 | 1,066 | 4,32 | 1,055 | 0,960 |
| Interaction | 3,45 | 0,963 | 3,40 | 0,917 | 0,820 |
| Nurse-Nurse interaction | 3,21 | 1,038 | 3,02 | 0,998 | 0,438 |
| Nurse-Doctor interaction | 3,55 | 1,318 | 3,80 | 1,140 | 0,378 |
| Total | 3,20 | 0,499 | 3,43 | 0,707 | 0,233 |
| H2 | | | | | |
| Remuneration | 4,66 | 0,841 | 4,14 | 0,901 | 0,035 |
| Professional status | 2,81 | 0,646 | 2,57 | 0,706 | 0,207 |
| Autonomy | 3,86 | 0,741 | 4,08 | 0,935 | 0,371 |
| Organizational standards | 3,97 | 0,661 | 3,58 | 0,944 | 0,101 |
| Work requirements | 4,23 | 1,035 | 4,45 | 1,069 | 0,453 |
| Interaction | 3,54 | 0,752 | 3,70 | 0,926 | 0,532 |
| Nurse-Nurse interaction | 2,92 | 1,023 | 3,28 | 1,126 | 0,238 |
| Nurse-Doctor interaction | 4,37 | 1,171 | 4,11 | 1,322 | 0,477 |
| Total | 3,79 | 0,365 | 3,74 | 0,695 | 0,810 |

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Table 1 - Comparison of the professional satisfaction of the Nursing staff between the adult ICUs and child ICUs of three hospitals in the inland of Paraná. Paraná - Brazil, 2017 (n=226)

| | Child ICU | | Adult ICU | | p-value** |
|--------------------------|-------------|--------------|-------------|--------------|--------------|
| | Mean | SD | Mean | SD | |
| H3 | | | | | |
| Remuneration | 2,88 | 0,810 | 3,19 | 0,927 | 0,121 |
| Professional status | 2,44 | 0,718 | 2,73 | 0,905 | 0,113 |
| Autonomy | 3,52 | 0,924 | 3,84 | 0,960 | 0,136 |
| Organizational standards | 3,79 | 0,657 | 3,78 | 0,778 | 0,942 |
| Work requirements | 4,21 | 0,772 | 3,96 | 1,062 | 0,220 |
| Interaction | 3,16 | 0,798 | 3,59 | 1,023 | 0,036 |
| Nurse-Nurse interaction | 2,83 | 0,942 | 3,00 | 1,162 | 0,478 |
| Nurse-Doctor interaction | 3,49 | 1,020 | 4,15 | 1,298 | 0,011 |
| Total | 3,32 | 0,521 | 3,53 | 0,662 | 0,155 |

*H1: Private and accredited hospital; H2: Private hospital; H3: Public hospital;

**Independent Student T test.

In the Nursing team's perception of the work environment through the application of B-NWI-R (Table 2), a p-value of 0.023 was found in the doctor-nurse interaction domain, with a higher mean in the adult ICU of H3. In H1 and H2, the B-NWI-R domain scores were not statistically significant between the adult and child ICUs.

Table 2 – Comparison of the perception of the Nursing staff about the work environment between the adult ICUs and child ICUs in three hospitals in the inland of Paraná. Paraná - Brazil, 2017 (n=226)

| | Child ICU | | Adult ICU | | p-value* |
|------------------------|-------------|--------------|-------------|--------------|--------------|
| | Mean | SD | Mean | SD | |
| H1 | | | | | |
| Autonomy | 1,98 | 0,606 | 2,11 | 0,651 | 0,342 |
| Control | 2,05 | 0,507 | 2,04 | 0,630 | 0,772 |
| Doctor-Nurse relation | 1,82 | 0,729 | 1,94 | 0,732 | 0,395 |
| Organizational support | 2,02 | 0,517 | 2,08 | 0,562 | 0,629 |
| Total | 1,99 | 0,495 | 2,04 | 0,583 | 0,685 |
| H2 | | | | | |
| Autonomy | 2,23 | 0,563 | 2,02 | 0,532 | 0,165 |
| Control | 2,15 | 0,471 | 2,11 | 0,637 | 0,511 |
| Doctor-Nurse relation | 2,05 | 0,709 | 2,07 | 0,740 | 0,948 |
| Organizational support | 2,19 | 0,536 | 2,04 | 0,487 | 0,249 |
| Total | 2,15 | 0,503 | 2,02 | 0,495 | 0,328 |
| H3 | | | | | |
| Autonomy | 1,97 | 0,462 | 2,08 | 0,516 | 0,245 |
| Control | 2,14 | 0,516 | 2,02 | 0,492 | 0,301 |

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Table 2 – Comparison of the perception of the Nursing staff about the work environment between the adult ICUs and child ICUs in three hospitals in the inland of Paraná. Paraná - Brazil, 2017 (n=226)

| | Child ICU | | Adult ICU | | p-value* |
|------------------------|-------------|--------------|-------------|--------------|--------------|
| | Mean | SD | Mean | SD | |
| H3 | | | | | |
| Doctor-Nurse relation | 1,82 | 0,483 | 2,13 | 0,740 | 0,023 |
| Organizational support | 2,03 | 0,421 | 2,11 | 0,480 | 0,363 |
| Total | 2,02 | 0,421 | 2,06 | 0,469 | 0,719 |

*H1: Private and accredited hospital; H2: Private hospital; H3: Public hospital;

**Independent Student T test.

DISCUSSION

Regarding the characterization of the study participants, the results corroborate the evidence available in the literature, which reveals the predominance of female professionals in the Nursing contingent, a condition closely related to historical aspects of the profession's development.^{15,16} The prevalence of individuals aged between 30 and 45 years old was also attested, considered a highly productive period from the professional perspective.

Despite the recent expansion in the number of higher level professionals working in the execution of care in critical units, this study found a predominance of technical level professionals, a scenario that strengthens the results of recent studies in the context of intensive care.^{4,15}

Among the job satisfaction domains, the schooling level represents a substantial aspect in the differentiation of the satisfaction levels among Nursing professionals, more satisfaction of high school professionals compared to graduated professionals being expressed in a recent study.¹⁵ Despite relevant, this was not the intention of the study, since the research core was the verification of job satisfaction and perception of the work environment in relation to the type of ICU. In other words, it is believed that these phenomena, due to the importance of Nursing staff management, deserve to be appreciated by different scopes.

By comparing data on the mean length of work of professionals with recent evidence from the literature, originating from a quantitative study conducted in a high-complexity university hospital, we can see lower means for the participants of this study.¹⁷ By analyzing this result in isolation, it is believed that the differences in the mean working time found are intrinsically related to the differences in the nature of resource management, i.e., public and private.

Still with regard to the working time, it is important to note that stressors related to the work process in the ICU, such as work overload, job conflicts, devaluation, working conditions,

double hours, lack of autonomy, among others, impact on the adaptation of the professional to the work environment and, consequently, on their satisfaction and positive perception regarding the work environment.¹⁸ Nevertheless, data somehow disprove this assertion, since in general the teams - especially H1 and H3 - were satisfied with their work and positively evaluated their professional practice environment.

The motivation to work in the intensive care area was predominantly distinguished as a personal choice of the professionals, an important condition for a good professional performance, especially in health, where the work process is permeated by daily challenges, both for technical-scientific aspects as for interpersonal relationships. Thus, the compatibility between the professional's preference and the function performed is considered by the Nursing staff as an essential attribute for quality care, as well as for satisfaction in the work environment, besides being a basic precept of competency management.¹⁹

Regarding the feeling of satisfaction, regardless of the application of the ISP scores, almost all the professionals were positively positioned on the performance in the ICUs, as well as they specified benefits associated with employment that may contribute to work-related satisfaction, among them they benefit under the health, education and welfare needs.

Although the study participants expressed satisfaction with the work and with the characteristics of the benefits received, it is important to compare these results with other realities in which the benefits provided to the staff can cause controversy regarding job satisfaction.¹⁹ In general, workers see benefits as a positive factor in their relationship with the contracting company; however, when there is a distinction in the distribution of these benefits, it opens up to conditions of dissatisfaction and conflicts among team members. The data from this study shows that barely over half of the professionals have some kind of benefit, besides remuneration, which configures inequality in the organizational arrangements in relation to human resources.

From the data analysis obtained through the ISP instrument, it was noticed that the Nursing professionals working in the child ICU of the hospital characterized as H2 (private) presented statistically higher mean scores related to *remuneration*. Considering the values attributed by the Likert scale of the instrument, where one denotes "total agreement" and seven "total disagreement", it can be stated that the professionals of the child ICU in this hospital are less satisfied with the salary received, which, by itself is already a relevant finding.

Focused on *remuneration* as a component of job satisfaction, other studies highlight the importance attributed to this domain, being considered the most relevant within the scale, but the least attributed satisfaction, while the *professional status* presented less importance with higher satisfaction.¹⁶

Despite the great relevance of the remuneration standard for the satisfaction of the professionals, it is essential to consider that motivation is the result of intrinsic and extrinsic factors in the work process, including work environment and the relationships established between the team, especially between the leader and the employees.¹⁹ It is precisely in this context that it is considered a great advance of this study to investigate professional satisfaction in conjunction with the Nursing practice environment, since the latter is based on aspects that, naturally, will reflect on job satisfaction, such as organizational support, which is nothing more than the foundation that industry management gives to workers.^{12,13}

In this study the *interaction* and *nurse-doctor interaction* domains stood out, for which data reveal that the adult ICU professionals of the public hospital (H3) show statistically higher means in the scores, indicating less satisfaction from the point of view of the relationship between team members, and it is important to emphasize that for the interaction between nurse and physician, the mean score exceeds the recommended neutrality point (value 4) on the scale.

It is reiterated that the intensive care work process is permeated by stressors related to the patient critical state.¹⁸ Work overload, frequent complications and/or emergency situations and the technological apparatus necessary to provide care are some examples of conditions that are known to disadvantage the working environment in the ICUs.

A study about the meaning attributed to the care environment characterizes the ICUs as a living and dynamic environment, in which the professionals make continuous efforts to maintain the patient's life and recovery.²⁰ In this care context, professionals tend to face frustrations due to the failure to restore health and even the loss of patients who inevitably evolve to death. Thus, the relationships and communication network established among professionals, patients and family members also contributes to the complexity of the ICU care process.²¹

Considering the workload and the other stressors that influence the work process and, consequently, job satisfaction, the profile of the assisted patient stands out, a variable highlighted in this study as a characteristic worthy of attention in the management scenario. Although professional satisfaction in health institutions is currently being studied, there is a lack of comparative studies that address the peculiarities of the work process in different modalities of intensive care.^{22,23}

Despite the scarcity of references about the peculiarities of the work process in different types of ICU, it is possible to find comparative studies addressing the organizational climate and the safety culture of the intensive care patient, which highlights distinct perceptions about aspects of culture and patient safety climate among adult, pediatric

and neonatal ICUs, even when such units belong to the same institution.²⁴

Amid all the care context adversities in intensive care, there are also relationships between health professionals who promote care, often characterized by power struggles and the pursuit of professional autonomy. A recent literature review aimed at characterizing the working environment of hospital nurses and relating these characteristics to the safety of Nursing care has shown that satisfactory working relationships between doctors and nurses result in low hospital mortality rates and less incidence of adverse care events, such as medication errors, care-related infections, and falls, among others.²⁵

Regarding the assessment of the work environment for the Nursing practices, the B-NWI-R instrument provided evidence supporting aspects already discussed in relation to job satisfaction, and it was also possible to observe a statistically higher mean in the *doctor-nurse interaction* domain for adult ICU professionals at the public hospital (H3). This domain refers to the mutual respect between the mentioned professional classes, in order to improve the communication processes that guarantee the effectiveness of health care.¹²

The scarcity of favorable attributes in the work environment of the adult ICU of this research contrasts with the results found in a similar study conducted in intensive care units aimed at adult patients, in which the *doctor-nurse interaction* presented itself as the most favorable domain, followed by *autonomy* and *organizational support*.¹⁶

Still regarding the perception about the work environment, there is in the literature a recent report of positive perceptions of Nursing professionals in a pediatric ICU regarding professional relations, autonomy and organizational support, in contrast to the evidence that the doctor-nurse interaction continues to be an obstacle to multi-professional communication.^{4,17} Given this contradictory scenario, it is believed that several factors interfere in the interpersonal relationships of the health professionals, including the structure and organizational culture of the institutions. To understand this multi-factorial process, the use of qualitative research is believed to be fruitful, in which professionals can express their views more comprehensively.

Another important aspect to highlight regarding job satisfaction and the perception about the work environment is the motivation for professional recognition and autonomy, which are positive predictors of professional practice and result in higher quality of care.^{8,17,18} In other words, these are aspects that go beyond the dynamics of professional relationships and people management, as they deserve to be understood as prior or that affect the product (care) of health work.

As a study limitation, the use of non-probabilistic sampling is highlighted, in addition to the investigation of

job satisfaction and the work environment, unconnected with other care and/or managerial results. As a contribution to the Nursing practice, the research demonstrates statistically significant differences regarding the type of ICU, which reinforces that management practices in favor of improvements in the work of the Nursing team need to be strategic and punctual, according to each singularity.

It is believed that the results of this study will contribute to reinforce the need for managerial readjustments in the Nursing area, as well as stimulate the production of new investigations regarding the factors that interfere with satisfaction and the workplace environment.

CONCLUSION

It was concluded that, in general, the Nursing teams of the three hospitals and of all the units (adult and child) were satisfied with the work and positively evaluated their professional practice environment.

In contrast to the above, there was a statistically significant difference in the following domains in relation to the adult ICU active teams compared to the child ICU: in the private hospital (H2), satisfaction regarding *remuneration* was worse for the professionals working in the child ICU, while in the public hospital (H3), adult ICU professionals had a significantly higher mean (indicating worse satisfaction) about the *interaction* between the team. As for the work environment, the Nursing professionals of the public hospital (H3) adult ICU also reported worse results in relation to the *doctor-nurse interaction* domain. These findings indicate possible incremental needs, especially regarding relational aspects in the adult ICU of the public hospital.

Although the reflections about the association between job satisfaction and the perception of the work environment with the peculiarities of working in adult and child ICUs were limited by the scarcity of studies with a similar approach in the literature, it is noteworthy that the positive aspects identified about the satisfaction level and about the relationship with the work environment of the Nursing professionals are important tools for guiding management practices. Studies with representative sampling and focus on the peculiarities of care practices should be encouraged, with a view to contributing to the construction of management strategies that impact on Nursing care.

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