ISSN: 1676-4285

OBJN Online Brazilian Journal of Nursing
ENGLISH
Federal Fluminense University
AURORA DE AFONSO COSTA NURSING SCHOOL
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Original Articles

Labor conditions and relations in critical care units: a survey

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ABSTRACT

Aim: to investigate the conditions and working relationships of nursing professionals in critical care units. **Method:** a survey was conducted in three hospitals in Paraná in 2013. The participants comprised of 64 (30.19%) nurses and 148 (69.81%) professionals from the technical nursing staff, working in a Surgical Center, an Intensive Care Unit, and an Adult Emergency Room. The questionnaire *Research on the Conditions and Labor Relations* was used and the data were analyzed using descriptive statistics. **Results:** The occurrence of high workload was observed (scores between 5.25 to 6.85 points); sub-sizing of the staff (4.38 to 6.9); insufficient salary (4.98 to 8.7); lack of stimulus by the institution (5.83 to 8.0); and low labor motivation (6.03 to 8.3). **Discussion:** Conditions and labor relations in critical care units can influence the care provided and the quality of life of professionals. **Conclusion:** Most of the participants identified that the conditions and labor relations where they work are inadequate.

Descriptors: Work Conditions; Work; Work Satisfaction; Nursing.

Valera IMA, Wisniewski D, Reis GAX, Inoue KC, Matsuda LM. Labor Conditions and Relations in Critical Care Units: a survey. Online braz j nurs [internet] 2016 Jun [cited year month day]; 15 (2):196-204. Available from: http://www.objnursing.uff.br/index.php/nursing/article/view/5469

INTRODUCTION

The work of nursing professionals is within the tertiary sector of the economy and therefore is likely to suffer losses resulting from social and economic capitalist policies that, by emphasizing quantity rather than the quality of services, leads companies to the casualization of working conditions[1].

It is especially the case in hospitals that the nursing staff often develops its activities with a limited number of employees, work overload, deficiencies in professional training, exposure to contaminants, and frequent contact with suffering and death[2]. In scenarios such as this, workers' exhaustion or physical and emotional illness tends to be higher[3], increasing the likelihood of adverse events, with damage to the health and safety of patients[2].

In a systematic review of the literature conducted from the analysis of 29 studies[4], it was found that the conditions and labor relations in nursing were related to the outcomes of patients. In this sense, the greatest number of hours of nursing care, collaborative relationships between nurses and doctors, and higher skill levels and experience were associated with better management of the patient's pain and lower frequency of falls and pressure ulcers[4].

It is particularly the case in those care units considered critical[5], such as Emergency Rooms (ER), Surgical Centers (SC) and Intensive Care Units (ICU), that exhausting and stressful labor relations and conditions, which result in inhuman work environments, are common and have the potential to affect professionals' and patients' safety[3].

The investigation of situations relating to the conditions and relations in the context of nursing work can promote ideas and practices aimed at improving the service[6]. Thus, information regarding these variables, not only fosters the literature on the subject, but also supports more assertive decision making in the development and monitoring of measures to promote workers ' health and improving the quality of care.

Based on the above, the following question was raised: how is the working environment of the nursing team employed in critical care units of different hospitals presented? To answer this question, this study aimed to investigate the working conditions and relations of nurses in critical care units.

METHOD

This is a survey using a quantitative approach, and was conducted from February to June 2013 in three hospitals in the city of Parana - a philanthropic hospital (PHH), a private hospital (PH) and public hospital (PBH).

The study population consisted of nurses, nursing technicians, and nursing assistants who met the following inclusion criteria: acting in a critical unit - CC, Adult ICU (ICU-A) or ER - formally employed in the establishment for at least six months. Nursing professionals who were away from work for whatever reason were excluded. Therefore, the present study included 212 participants, of which 64 (30.19%) were nurses and 148 (69.81%) were mid-level nursing professionals (technicians and nursing assistants), hereafter referred to as technical team. Seven nurses, 13 nursing technicians and 9 nursing assistants refused to participate. Table 1 contains the distribution of subjects according to professional category and hospital.

After clarification on the research, the formal authorization of the participants and the reading and signing of the consent form

(ICF) in two copies, data collection was carried out. To achieve this, the specific part of the conditions and relations of work contained in the questionnaire of the *Programa Nacional de Avaliação dos Serviços de Saúde* (PNASS) (National Program for the Evaluation of Health Services) of the Ministry of Health[7], was applied and adapted for the purposes of this study.

Table 1 - Distribution of subjects according to professional category and hospital institution. Paraná, 2013.

Hospital	HPB		HP		HF	
Category	N	%	N	%	n	%
Nurse	36	37,5	8	19,5	20	26,7
Technical	60	62,5	33	80,5	55	73,3
Staff						
Total	96	100	41	100	75	100

Source: author.

It is noteworthy that the 14 items covered were distributed in Likert scale, converted to a scale form from zero (0) to ten (10) points, representing respectively totally unsatisfactory to completely satisfactory results.

Data were tabulated through double typing, using Microsoft Office Excel® 2007 software, and then imported into the statistical program SAS (Statistical Analysis System) for calculating the mean, standard deviation, and absolute and relative frequencies. In the data analysis, average scores below seven (7) points were considered unsatisfactory, and when equal to or above that value, satisfactory[7]. The cutoff point was defined together with the statistical, based on the PNASS manual[7]. This study followed the Brazilian ethical principles and was approved by the *Comitê Permanente de Ética em Pesquisa Envolvendo Seres Humanos* (COPEP) (Standing Committee on Ethics in Research Involving Human Subjects) of the State University of Maringá. It is registered under the CAAE No. 12503813.8.0000.0104, Opinion No. 207,365 of 18 February 2013.

RESULTS

The average arranged by items relating to working conditions is displayed in table 2. The data shows that in all hospitals and between the nurses and the technical staff, the hours worked were considered unsatisfactory, but the security was considered satisfactory in all hospitals and among all professional categories.

Additionally, in respect of working conditions, it is observed that the PBH professionals were satisfied with their salary, while the professionals of the PHH and PH were dissatisfied. Among these, the lowest mean value was that of the PHH technical team.

The average arranged by items relating to employment is contained in Table 3. It is noted that the relationship with the immediate supervisors in the surveyed institutions is satisfactory between the two categories of the three hospitals. With the exception of PHH nurses, the other professionals surveyed expressed dissatisfaction with the stimulus given to work by the institution and felt little motivation to continue providing service. Only the PBH nurses and the PH technical team indicated dissatisfaction regarding the appreciation of their work by their immediate supervisor.

DISCUSSION

The data showed that the working conditions presented an imbalance between the adequacy of nursing care time with the

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Table 2 - Means and standard deviations of the items that make up working conditions, according to the professional category and institution. Paraná, 2013.

Category/Conditions	Nurses			Technical Staff		
	HPB	HP	HF	HPB	HP	HF
Workload at the hospital	6,19(2,66)*	5,25(3,2)*	6,85(2,16)*	6,18(2,87)*	6,45(2,29)*	5,91(2,46)*
Team dimensioning	5,69(2,87)*	4,38(3,25)*	6,9(2,22)*	6,1(2,25)*	5,67(2,87)*	6,62(2,51)*
Security for work execution	7,25(2,44)	8,13(2,7)	8,1(1,8)	7,48(2,01)	7,36(2,36)	8,2(1,86)
Accommodation and furnishings of the unit	5,64(2,55)*	5,75(3,11)*	8,35(1,98)	5,28(2,78)*	6,3(2,67)*	8,09(2,22)
Hygiene of the work unit	7,53(1,95)	8,13(2,03)	8,35(1,84)	8,1(1,61)	8,03(1,79)	8,75(1,52)
Availability of materials and equipment in the unit	6,97(2,37)*	8,5(1,85)	8,95(1,23)	7,72(1,95)	7,42(2,7)	8,6(1,76)
Occupational health and safety	5,31(2,52)*	7,88(2,75)	7,6(2,54)	7,02(2,09)	6,03(2,66)*	7,75(2,21)
Salary	7,81(2,2)	6,38(3,11)*	5,55(2,19)*	8,7(1,33)	5,21(2,79)*	4,98(2,43)*

Source: author.

Table 3 - Means and standard deviations of the items that make up the working relationship, according to the professional category and institution. Paraná, 2013.

Category/Conditions	Nurses			Technical Staff		
	HPB	HP	HF	HPB	HP	HF
Distribution of team tasks	6,22(2,84)*	6,5(3,66)*	7,5(1,64)	7,1(2,28)	6,91(2,38)*	6,98(2,39)*
Relationship with immediate supervisors	7,22(2,11)	7,25(4,23)	9(1,41)	7,55(2,75)	7,61(2,44)	8,2(1,92)
Hospital stimulus for work	5,83(2,73)*	6,75(3,77)*	8(1,97)	6,17(2,33)*	6,03(2,54)*	6,42(2,94)*
Work appreciation by the immediate supervisor	5,89(2,72)*	7,63(3,54)	8,15(1,87)	7,03(2,33)	6,58(2,82)*	7,49(2,28)
Compatibility between activities and exerted position	7,83(1,95)	8,75(1,16)	8,55(1,28)	8,17(1,67)	8,30(1,59)	7,78(2,35)
Motivation to continue in service	6,03(2,93)*	6,88(3,44)*	8,3(1,78)	6,6(2,72)*	6,64(2,16)*	6,84(2,73)*

Source: author.

demand of the investigated institutions, since both the workload and dimensions of the team had unsatisfactory results. Similarly, a previous study found that the conditions and working relationships of nursing professionals, especially in critical care units, can positively or negatively influence the care provided and also the quality of life of workers[4].

This result is of concern because the nursing workload is related inversely with the personnel measurement[8], and therefore is a factor that needs to be urgently and appropriately investigated in order to improve the quality of life, and consequently the health of professionals.

While recognizing the need to balance the nursing staff in all its areas of operation so that the workload is adjusted to the demands of work, it seems to be common practice in Brazilian institutions, since it is perceived that most nurses do not master the techniques and tools necessary to carry out dimensioning[9]. Allied to this, there is limitation in the standardization of sizing calculation and also institutional difficulties to meet the required number of contracts[10].

Therefore, it can be considered that the overload derived from an insufficient workforce increases exhaustion and illness within professionals and this tends to increase the

rate of absenteeism through illness[8] which, in turn, may be associated with worse welfare outcomes[11].

In the PBH and PH, the accommodation and furnishing of the units were also considered unsatisfactory (Table 2), but satisfactory by the PHH team. Although studies on the influence of these elements in nursing work are still developing, it is believed that inadequacy in these areas causes risks, harm to patients, and staff because, in addition to promoting an uncomfortable working environment, it favors improvisation, misuse of the limited resources available and it limits the ergonomics in the development of activities.

Since these are critical care units, where decisions and procedures require immediate and accurate actions, the adequacy of work regarding environment is an essential factor. In this regard, a study[12] aimed at evaluating hosting by means of risk classification was performed in the Emergency Service of a public teaching hospital and it concluded that the physical structure of the service, when appropriate, contributes to the quality of the nursing staff , as well as the convenience and security to users and companions.

It is noteworthy that the satisfaction indicated by PHH professionals on physical fitness and of the furniture of services may be related to the recent improvements in the institution. In contrast, only the nurses at the PBH considered the availability of materials and equipment in their respective unit as unsatisfactory (Table 2).

The question that related to the security of individuals to work safely received satisfactory scores in both professional categories of the three hospitals. This finding contradicts what has been identified in respect of the professionals questioned who were dissatisfied with the workload, team dimensioning, accommodation and furniture which, as discussed, are necessary resources for ensuring the safety and quality of those actions performed.

The paradox may be a result of sufficient availability of materials and equipment, an aspect that led to the satisfaction of the participants in this study, with the exception of PBH nurses. Therefore, it is evident that the deficiencies that contribute to job insecurity and that are inherent to the functional framework of nursing and its' physical structure are minimized by devices that facilitate and make care safer.

In Brazil, in 2005, the Regulatory Standard 32, approved by Ordinance No. 485 of the Ministry of Labor and Employment, established basic guidelines for the creation of protective measures for the safety of health care workers, with actions aimed at improving and maintaining regular equipment and the reduction of physical and emotional burden of professionals due to poor service conditions[13]. However, a decade later, we can still observe that professional dissatisfaction still exists in respect of the ability to provide basic customer service as identified in this study

Additionally in respect of working conditions, it is observed in Table 2 that the PBH professionals were satisfied with their salary, while the professionals working at the PHH and PH were dissatisfied. Among these, the lowest mean value was the PHH technical team. The fact that PBH workers identify themselves as more satisfied with their salary is possibly related to the statutory contract system, stability, career plan, and the fact that they earn better wages than other workers in the same category working in other health institutions in the region.

In Brazil, as in other countries, the low pay of nurses and the consequent need to

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supplement their income through other activities generates work overload, dissatisfaction, lack of interest, and an intent to leave the profession[14,15]. Faced with this scenario, the literature[15] identifies possible solutions, such as regular monitoring of those who become demotivated to follow the profession, using scientific studies, not only of those who remain active within the profession, but also of those who effectively abandon it. Moreover, the promotion of actions aimed at favoring interpersonal relationships with colleagues, such as informal meetings, training programs, and group work; as well as changes in work organization through more flexible hours.

With regard to labor relations, it is observed that the relationship with immediate supervisors in the units studied achieved satisfactory scores in both categories of the three hospitals. In this sense, literature[16] identifies that good relations with co-workers and, the subsequent maintenance of a pleasant work environment can encourage the greater permanence of professionals in the service.

In addition to the previous premise, the compatibility between the activities carried out and the position for which an individual was hired was also considered satisfactory by all professional categories of the three institutions. This shows that the working conditions, most often defined by employment contracts, are being fulfilled. However, it should be considered that certain factors such as organizational climate and tensions, unrelated to the contractual terms and present in the job routine, have a strong influence on the occurrence of adverse events and also in the job (in)satisfaction[3,14].

We must consider that the work performed by nurses in hospitals is complex, intense, and continuous. Therefore, the consequences of a stressful workday can maximize the impacts of any negative working conditions, including the under-sizing of the staff, high workload, and physical and psychological stress that can compromise the health of workers and, consequently, the quality of care[1].

In relation to satisfaction, the results showed that the majority of professionals surveyed showed dissatisfaction in terms of the stimulus given by the institution to their work and felt little motivated to continue in their job. These data cause concern because the lack of motivation for nursing workers at institutions to remain in the profession permanently and their intention to abandon the profession have been themes within both national and international research which identifies this trend and concludes that as a result) the nursing workforce, particularly that made up by young people, is increasingly unstable and unhappy with their working conditions[14-16].

A study undertaken involving 3,229 nurses from 18 major public hospitals in Rio de Janeiro found that half of the professionals tried to leave the profession, and about a quarter said they were dissatisfied with work[14], corroborating the data presented in this study. According to the literature[17], facts of this kind occur when the performance of nursing takes place in a flawed health care system, where there is no human and material resources to meet the demand and where expectations are rarely met, and where the humanization precepts in labor relations and care tend to be scarce.

In the present study, although most participants identify that they did not feel stimulated to work, dissatisfaction with the appreciation of their work was only shown between the professional nurses of PBH and members of the technical team from PH. This

data may mean that a good relationship with the management and the recognition by the heads managers of the activities are important for the progress of the service; however, contrary to what the literature states[16], they are not sufficient to encourage and guarantee that a worker will stay in the institution.

In nursing, it is noted that the lack of recognition of the average level of professional skills is a source of hierarchical conflict that generates significant suffering and decreased self-esteem of these individuals[18], because their knowledge is questioned and their professional expertize is rejected as a result of them not possessing higher level education.

It is recognized that the appreciation of the merits of nursing professionals is given mainly for their performance, but also for their technical and scientific knowledge[19]. Therefore, it is recommended to those mid-level professionals who are responsible for developing nursing teams and their continuous improvement so that, in addition to developing their skills, they may obtain greater recognition for their work in a natural and permanent way. Health care is run by professionals who target users and their own satisfaction. However, exposure to situations in the workplace that generate discontentment and dissatisfaction can result in illness and may compromise patient safety[3]. From this perspective, healthcare services and nursing professionals need to focus on their weaknesses and implement effective prevention strategies and coping mechanisms that weaken workers and the care provided to users[20].

In accordance with the above, adjustments in terms of the conditions and labor relations of the nursing staff are required and are emerging. To this end, proposals and improvement strategies should be widely discussed and planned so that the needs of workers, institutions and service are met.

CONCLUSION

In the critical units subject to investigation, most participants pointed out (SUGGEST identified) that the conditions and labor relations in which they operate are inadequate. Nevertheless, some aspects were considered satisfactory, such as security for the execution of work, unit hygiene, the relationship with the immediate supervisor, and the compatibility of activities with the position held at the institution.

In order to raise awareness of the subject of this study, improve the quality of life of workers and, in particular, to promote safe care, we suggest further studies focusing on the items evaluated, using different approaches and methods, such as those of the longitudinal and/or experimental type, with the intention of establishing, in greater detail, the cause and effect relationship between relations, working conditions, and satisfaction of nursing professionals.

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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 versión 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: 01/30/2016
Revised: 04/13/2016
Approved: 04/17/2016