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# STRESS AND COPING AMONG NURSING PROFESSIONALS OF INTENSIVE AND SEMI-INTENSIVE CARE UNITS

ESTRESSE E COPING ENTRE PROFISSIONAIS DE ENFERMAGEM DE UNIDADES DE TERAPIA INTENSIVA E SEMI-INTENSIVA

ESTRÉS Y COPING ENTRE PROFESIONALES DE ENFERMERÍA DE UNIDADES DE TERAPIA INTENSIVA Y SEMI-INTENSIVA

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#### **ARSTRACT**

**Objective:** to analyze the stress and *coping* strategies of intensive and semi-intensive care unit nursing teams. **Method:** descriptive and quantitative study conducted with 50 professionals working in intensive and semi-intensive care unit using a form to survey bio-social and labor data, scores in the Work Stress Scale and Occupational *Coping* Scale. **Results:** the comparison between nursing categories showed that 22% nurses had low stress and 36% of nursing technicians, high stress. Control was the *coping* strategy most frequently used. **Conclusion:** nursing professionals with low level of stress predominated. This may be related to prevalence of use of control strategies, which are considered more effective to deal with stress. **Descriptors:** Stress; Professional Burnout; Psychological Stress; Nursing Team.

#### RESUMO

Objetivo: analisar o estresse e as estratégias de coping da equipe de enfermagem que atua em unidade de terapia intensiva e semi-intensiva. Método: estudo descritivo e quantitativo, realizado com 50 profissionais que atuam em unidade de terapia intensiva e semi-intensiva, utilizando-se formulário de dados biossociais e laborais, escala de estresse no trabalho e escala de coping ocupacional. Resultados: 54% dos profissionais de enfermagem apresentaram baixo estresse e 46% alto estresse. Quando comparadas as categorias profissionais, verificou-se prevalência de alto estresse nos enfermeiros (22%) e baixo estresse nos técnicos de enfermagem (36%). O controle foi a estratégia de coping mais utilizada. Conclusão: predominam profissionais de enfermagem com baixa intensidade de estresse, fato que pode estar relacionado ao predomínio do uso de estratégias de controle, consideradas mais efetivas para lidar com o estresse. Descritores: Estresse; Esgotamento Profissional; Estresse Psicológico; Equipe de Enfermagem.

#### RESUMEN

**Objetivo:** analizar el estrés y las estrategias de *coping* del equipo de enfermería que actúa en unidad de terapia intensiva y semi-intensiva. *Método*: estudio descriptivo y cuantitativo, realizado con 50 profesionales que actúan en unidad de terapia intensiva y semi-intensiva, utilizando un formulario de datos bio-sociales y laborales, escala de estrés en el trabajo y escala de *coping* ocupacional. *Resultados*: 54% de los profesionales de enfermería presentaron bajo estrés y 46% alto estrés. Cuando comparadas las categorías profesionales, se verificó prevalencia de alto estrés en los enfermeros (22%) y bajo estrés en los técnicos de enfermería (36%). El control fue la estrategia de *coping* más utilizada. *Conclusión*: predominan profesionales de enfermería con baja intensidad de estrés, hecho que puede estar relacionado al predominio del uso de estrategias de control, consideradas más efectivas para lidiar con el estrés. *Descriptores*: Estrés; Agotamiento Profesional; Estrés Psicológico; Personal de Enfermería.

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#### INTRODUCTION

The increased technological innovations brought about by globalization have favored changes in everyday life, especially at work. Thus, professionals involved in health care, such as nursing staff, have faced numerous innovations in the hospital environment and they need constantly update in short times, what may go beyond their capacity of adaptation.<sup>1</sup>

In health care, nursing professionals deal with problems related to interaction with other members of the multidisciplinary team, ambiguity and conflict of functions, double shifts, pressure from supervisors, hierarchical organization of the institution and constant contact with critically ill patients, especially in the case of professionals working in intensive care units.<sup>2</sup>

Intensive or semi-intensive care units are hospital sectors used to care for patients in critical state that require permanent and specialized assistance. Nursing professionals working in this sector are expected to have accurate knowledge and to follow the technical and technological updates targeting the care of patients with clinical symptoms of greater severity.<sup>2</sup> These demands can go beyond the adaptive resources of these professionals, causing them occupational stress with effects on their productivity and quality of the care provided.3

Occupational stress derives from relationship between working conditions and individual characteristics of workers. happens when the individuals evaluates work demands as exceeding the coping resources they have.4 Under a situation evaluated as stressful, individuals adopt strategies in an attempt to overcome it, called coping or confronting strategies. They consist of behavioral and cognitive actions used to solve or minimize the effects of stress. Coping can be seen in two forms of strategies: strategies centered on the problem and strategies focused on the emotion. The first aims to analyze and define the situation in order to seek alternatives to solve it. The second type is used when the individual realizes that stressors cannot be modified, and it is necessary to continue interacting with them. emotion-centered coping seeks to maintain hope and optimism, denying both the situation and the consequences, or acting as if the circumstances do not matter. This type of strategy includes avoidance, guilt, distancing, selective attention, positive comparisons and extraction OF positive aspects from negative events. 5

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Therefore, it is important that nursing professionals be able to identify and recognize stressors that they often experience so that they may develop and implement more effective coping strategies to minimize stress. Coping strategies enable these professionals to live with lower stress levels in their work environment, so that they have higher productivity and better quality of working life. Furthermore, the analysis of stress level strategies that and coping professionals use in critical units is of paramount importance because patient safety is linked to their own health state. Thus, the present study aimed to analyze the stress and coping strategies used by nursing team working in intensive and semi-intensive care units.

### **METHOD**

Exploratory and descriptive study with quantitative approach. Data were collected in September 2010 in Intensive and Semi-Intensive Care Units of the University Hospital, University of São Paulo (HU-USP). The University Hospital (UH) was opened in 1981 and is located in the west of the city of São Paulo. This institution aims to develop teaching and research activities in health, in addition to providing hospital care of medium complexity. The population assisted by the UH resides in the districts of Butanta, Jaguaré, Morumbi, Raposo Tavares, Rio Pequeno and Vila Sônia, besides the university community that also accesses this service. There are 258 beds available; 12 destined are for individuals who need Intensive Care (Intensive Care Unit) and 8 for those who require Semi-Intensive Care (Semi-Intensive Care Unit).

The study population involved all nursing professionals (assistants, technicians and nurses) working in Intensive Care Unit (ICU) and Semi-Intensive Care Unit (SICU) of the University Hospital, University of São Paulo (HU-USP). Professionals who were out of work for any reason were excluded from the study. Thus, subjects who agreed to participate were given a research protocol a sealed envelope consisting of: a form for survey bio-social data and labor characteristics of the nursing team, scores in the Work Stress Scale (WSS) and Occupational Coping Scale (OCS). Questionnaires had no identification, only the initial letters of the name of the respondent to location of forms in case of withdrawal from the research. Questionnaires were collected by researchers in due time agreed with the subject.

The form for collection of bio-social and labor data of the nursing staff was composed

of questions related to age, gender, marital status, number of children, professional training, time since graduation, time working in the institution, time working in the ICU, time working in the current unit of the institution, effectively overnights hours a day and are sufficient, time spent moving from home to the workplace, link with more than one job, reason of being assigned to work in the ICU, intention to leave the job at the hospital and intention to leave the profession (Appendix I).

In order to obtain data on stress, we used the Work Stress Scale (WSS), built and validated by Tamayo and Paschoal in 2004. This consists of 23 items that address various stressors and emotional reactions. Each item features a stressor and a reaction arranged in a Likert scale of five points, where: 1-"strongly disagree", 2- "disagree", 3- "partly agree", 4- "agree" and 5- "I totally agree". 15 Considering its practical utility, a reduced version of this scale has been proposed. It consists of 13 items of the original scale (items 4, 7, 8, 9, 13, 18, 19, 20, 22, 23, 24 and 28) representing the key organizational stressors and general psychological reactions. This reduced version was selected to use in the present study due to its convenience, because this version that can be completed in short time (Appendix I). Cronbach's Alpha coefficient obtained in the validation for the Brazilian context was 0.91 for the 23 items, attesting the instrument's good internal consistency. The Alpha coefficient obtained in the process of validation of the reduced version to Brazil was 0.85.7

This instrument was developed by Latack<sup>8</sup> and translated and validated for the Brazilian context by Pinheiro, Tróccoli and Tamayo in 2003.<sup>9</sup> Cronbach's Alphas found in validation were 0.878 for the Control Factor, 0.813 for the Management and 0,774 for Evasion. These values provided evidence of reliability of the scale.<sup>17</sup> The ECO consists of 29 items organized in a Likert scale of five points, where: 1- "I never do this", 2- "I rarely do this", 3- "Sometimes I do this", 4- "I often do this", and 5- "I always do it". These items relate to the way people deal with problems in the working environment and are divided into three qualifying factors (Appendix II) <sup>9</sup>:

- Control Factor: related to *coping* actions and revaluations of the stressing factor, consisting of 11 items (1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11);
- Evasion Factor: related to escapist actions and content revaluations, suggesting escape or detachment, consisting of nine items (12, 13, 14, 15, 16, 17, 18, 19 and 20);

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- Symptom Management Factor: it involves popularly accepted attempts to deal with the symptoms of stress such as relaxation or physical exercise, consisting of nine items (21, 22, 23, 24, 25, 26, 27, 28 and 29).

After collection, data were organized, stored and analyzed in Statistical Package for Social Sciences (version 20.0). Qualitative presented variables were as absolute frequency (n) and percentage (%) descriptive quantitative data, through measures (minimum, maximum, average and standard deviation).

For analysis of the WWS instrument, the stress level was obtained by summing up the scores of all items of the scale, and then dividing this sum by the number items that make up the instrument. Then, we calculated the average of the individual averages, resulting in the overall mean, from which individuals were classified as high (above the overall mean) or low (below the overall mean) level of stress. Also, the population mean for each item was calculated by summing up the scores given to a particular item and then dividing this value by the number individuals in the population. Thus, the higher the mean of the item, the greater the intensity of stress that this accounted for the population. 7

In turn, to analyze the OCS, the score of all items of the scale were summed up and divided by the number of items of the factor, resulting in the mean of each individual factor. These individual means were summed and divided by the number of research subjects, resulting in the mean of the factor. Thus, the higher the mean of a given factor, the more frequent is its use as a *coping* strategy by nursing professionals. <sup>9</sup>

In order to assess the internal consistency of the instruments, Cronbach's Alpha coefficients were used for all items that make up the WSS and the OCS and for each factor of the latter instrument. The instrument was considered reliable for the population concerned when the identified Cronbach's alpha value was greater than 0.4.

This study is part of a large research entitled "Patient Safety in Intensive and Semi-Intensive Care Units: Burnout in multidisciplinary team in two university hospitals" the subproject and "Incidents and adverse events in the Intensive Care Unit of a university hospital: prospective study". The study was reviewed and approved by the Ethics Committee of the University Hospital of the University of São Paulo. The registration number in the Ethics and Research Commitee-UH/USP is 746/07-

SISNEP CAAE: 0040.0.198.000-07. After clarification of the objectives of the research, a Informed Consent form was given to subjects who agreed to participate. This was signed in two copies, one for the researcher and the other for the participant.

## **RESULTS**

Regarding the analysis of internal consistency, the Work Stress Scale (WSS) presented Cronbach's alpha of 0.811 for the 13 items. The Occupational *Coping* Scale (OCS) had Cronbach's alpha value of 0.786 for the 29 items of the instrument and the Control, Evasion and Symptom Management factors had

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Cronbach's alpha of 0.814, 0.596 and 0.804, respectively. Thus, values were considered satisfactory and they certify the reliability of the instruments used in the population researched and, therefore, are acceptable for analysis.

Regarding biosocial characteristics of the nursing staff, there was predominance of female professionals (76%), single (44%), with children (60%), with technical nursing course (54%), requiring eight to ten daily hours of sleep (70%), and considering their sleeping hours insufficient (54%). Table 1 shows the distribution of nursing staff professionals according to work characteristics.

Table 1. Distribution of nursing team professionals working in the ICU and SICU according to working characteristics. São Paulo (SP), Brazil (2010).

Labor characteristics	n	%
Professional category		
Nurse	16	32
Nursing technician	27	54
Nursing assistant	7	14
Time working in the ICU		
< 3 years	8	16
4 to 7 years	11	22
8 to 11 years	4	8
> 11 years	21	42
Losses	6	12
Work shift		
Morning	14	28
Afternoon	14	28
Night	21	42
Losses	1	2
Working hours		
Fixed	45	90
Variable	5	10
Hours worked weekly		
≤ 36 hours	46	92
> 36 hours	2	4
Losses	2	4
Time spent moving from home to work		
< 1 hour	14	28
1 to 2 hours	35	70
> 2 hours	1	2
Further employments		
Yes	8	16
No	42	84
Reason to work in the ICU		
Choice of this area of expertise	32	64
Lack of vacancies in another sector	6	12
Relocation by necessity of the service	5	10
Other reasons	6	12
Losses	1	2
Feeling of satisfaction by being working in the ICU		
Yes	46	92
No	4	8
Total	50	100

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Table 1 shows the predominance of nursing technicians (54%), working in the ICU for more than 11 years (42%), in the night shift (42%), with fixed working hours (45%) and exercising their function for 36 hours or less weekly hours (92%). Nurses take one to two hours to move from home to work (70%), have no further employments (84%), said that the

reason of acting in the ICU is because they chose this area of expertise (64%) and are pleased to be working in the ICU (92%).

Table 2 presents the descriptive measures (mean, standard deviation, minimum and maximum) for the variables Age, Time Working in the ICU and Daily Need for Sleep.

Table 2. Descriptive measures of age, time working in the ICU and daily need for sleep of nursing professionals. São Paulo (SP), Brazil (2010).

Variables	Mean	SD*	Minimum	Maximum
Age (years)	39.26	11.25	21	60
Time working in the ICU (years)	11.62	7.82	0	27
Daily need for sleep (hours)	7.68	1.25	5	12

<sup>\*</sup>Standard deviation.

It was observed that workers of the nursing staff have on average 39.26 years of age (SD = 11.25), act in the ICU for 11.62 years (SD = 7.82) and have an average of 7.68 hours of daily need for sleep (SD = 1.25).

As for descriptive measures for the 13 items of the WSS, the average was 2.24 ( $\pm$  0.58) and the minimum and maximum values

were 1.00 and 3.62, respectively. From this average, the nurses were classified according to the intensity of stress, so that 54% (n = 27) of them had low level of stress and 46% (n = 23), high level of stress.

Table 3 shows the intensity of stress of nursing professionals according to their professional category.

**Table 3.** Stress intensity of nursing professionals working in the ICU and SICU, according to professional category. São Paulo (SP), Brazil (2010).

Stress	Nurse	Nursing technician	Nursing assistant	Total
Low	5(10%)	18 (36%)	4(8%)	27 (54%)
High	11 (22%)	9 (18%)	3 (6%)	23 (46%)
Total	16 (32%)	27 (54%)	7 (14%)	(50) 100%

Based on the above data, it is observed that there is predominance of high intensity stress (22%) among nurses and low intensity of stress level of nursing technicians (36%).

Table 4 presents the mean and standard deviation of each item composing the WSS.

Table 4. Mean and standard deviation per item of the Work Stress Scale-WSS among nursing professionals acting in ICU and SICU. São Paulo (SP), Brazil (2010).

	Item	Mean	SD*
1	The way tasks are distributed in my area makes me nervous	2.28	0.83
2	The lack of autonomy in the implementation of my work has been exhausting	2.10	0.93
3	Lack of confidence in my work from the part of my superiors has irritated me	1.88	0.87
4	I feel irritated with the deficiency in the dissemination of information on organizational decisions	2.56	1.09
5	I'm annoyed by having to carry out tasks that are beyond my ability	2.00	0.92
6	Having to work long hours makes me feel in bad mood	2.34	1.11
7	Inadequate vocational training has bothered me	2.46	1.24
8	I feel irritated because I'm not appreciated by my superiors	2.66	1.15
9	Little prospect of professional growth in the career has distressed me	2.64	1.39
10	Having to work on tasks below my skill level has bothered me	1.84	0.91
11	Competition in my work environment has made me feel in bad mood	1.98	0.93
12	Lack of understanding of what are my responsibilities in this work has caused me irritation	1.88	1.02
13	Insufficient time to accomplish my workload makes me nervous	2.62	1.22

<sup>\*</sup>Standard deviation.

Table 4 showed that the items with highest means, that is, the ones that cause more stress to nursing professionals are: "Insufficient time to accomplish my workload makes me nervous" ( $\overline{\times}$  2.62; SD = 1.22); "Little

prospect of professional growth in the career has distressed me" ( $\overline{\times}$  2.64; SD = 1.39); and "I feel irritated because I'm not appreciated by my superiors" ( $\overline{\times}$  2.66; SD = 1.15). The latter

was evaluated by nursing professionals as the more stressful situation at work.

On the other hand, it appears that the situations that cause less stress for nursing professionals are: "Lack of confidence in my work from the part of my superiors has irritated me " ( $\overline{\times}$  1.88; SD = 0.87); "Lack of understanding of what are my responsibilities

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in this work has caused me irritation " ( $\overline{\times}$  1.88; SD = 1.02); and " Having to work on tasks below my skill level has bothered me" ( $\overline{\times}$  1.84; SD = 0.91). This last statement was evaluated by nursing professionals as the situation that causes less stress at work.

Table 5 presents the descriptive measures according to each factor of the OCS.

**Table 5.** Descriptive measures of each item of the Work Stress Scale - WSS among nursing professionals working in ICU and SICU. São Paulo (SP), Brazil (2010).

Factor	Mean	SD*	Minimum	Maximum
Control	3.77	0.55	2.36	4.82
Avoidance	2.54	0.52	1.00	3.44
Management	2.66	0.72	1.00	5.00

\*Standard deviation

The average seen in Table 5 shows that Control factor was the coping strategy most frequently used by the population studied for coping with stress, then followed by the Symptom Management factor. In the first factor, the items with highest means, or those that represent the actions mostly used in coping with stress are: "I get even more involved with my duties, if I think that this can help solve the issue" ( $\overline{\times}$  3.88; SD = 1.00); "I try to work more quickly and efficiently"  $(\times 4.14; SD = 0.77);$  and "I endeavor to do what I think is expected from me" ( $\overline{\times}$  4.24; Dp = 0.77). As for Symptom Management, the most used actions were: "I seek the company of other people," "I try to engage in more leisure activities" and "I change my eating habits", with the averages of 3.32 (± 1.01), 3.18 ( $\pm$  1.00) and 2.28 ( $\pm$  1.07), respectively.

# **DISCUSSION**

The sample of this study was predominantly composed of females (76%), what is the reality found in the majority of institutions. It is known that nursing is a profession practiced mostly by women. However, it has been gradually more evident the insertion of men working in this area, which is a break towards gender stereotypes related to the care process. <sup>10</sup>

With regard to age and marital status, there is predominance of young nursing professionals aged between 28 and 50 years (average: 39.26 years; SD: 11.25) and singles (44%). This corroborates the reality found in a study carried out in hospitals of a city in the northwest of São Paulo State with 67 nursing professionals who work in Intensive Care Units. In this study, predominance of young professionals aged between 21 and 30 years (mean = 25 years, SD = 3.87) and singles (51%) was observed. 11 The gradual inclusion of young people in the labor market has been noticeable. This has become increasingly higher competitive and degrees

specialization and agility have been demanded from this still young population. Such requirements may exceed the adaptation capacity of young people, who often have no prior experience with the working environment, leading them to high levels of stress.<sup>12</sup>

There was predominance of professionals who have children (60%) and fixed working hours (90%). A study conducted in 2002 with nursing professionals (nurses assistants) of a public hospital in São Paulo found that 57.76% of professionals had fixed working hours and of these, 80% had children. 13 A literature review on working in shifts clearly showed that the presence of children prevents greater flexibility at work. 14 Thus, it is believed that when professionals have children, it is more difficult to work in different shifts and, therefore, they seek to maintain a fixed daily time schedule for work.

Despite the fact that fixed working hours enable better social stability and better sleep pattern, nursing professionals of this study consider their sleeping hours insufficient (54%). It is known that sleeping needs are specific to each individual and the lack of result psychobiologica, sleep may in psychosocial and psychospiritual changes, such as insomnia, irritability, excessive daytime sleepiness, feeling of hangover, fatigue, malfunction of the digestive system and social isolation. Thus, potential impact in the quality of life and, therefore, in the productivity and quality of care is expected. 15

Among nursing professionals, there was a predominance of nursing technicians (54%). This was also observed in a study with the nursing staff of an adult ICU of São Paulo/SP where 71% nursing professionals were nursing technicians, with predominance of this category all work shifts. <sup>16</sup>

This fact is related to personal sizing to work in the Intensive Care Unit established by COFEN. Resolution n° 293/2004. This sets the

number of nursing professionals according to the specificities of each unit. In this context, the numerical need for technicians is related to higher demand for direct and manual care and severity of patients admitted to the Intensive Care Unit <sup>17</sup>.

The time through which professionals have worked in the ICU was 11.62 years (± 7.82). This situation is similar to that observed in a study carried out with 53 ICU nursing professionals at a teaching hospital in Paraná, where the average working time was 13.4  $7.8)^{18}$ . lt is observed professionals in this and other investigations have considerable work experience in the area. It is believed that more experience is favorable to soften and/or offer subsidies for adaptation, evaluation and confrontation of stressors experienced at work, besides sophistication of coping strategies. assumption is supported and strengthened by studies in other care units that have found that the work in the institution and in the unit offer subsidies to adapt and improve the professional evaluation, mediating negative impact of stress at work.9

Regarding employment, 84% of nurses reported not to have another bond. A research with 15 professionals of the ICU nursing staff of a general hospital in Rio Grande do Sul showed that 67% professionals had only one employment<sup>19</sup>. Thus, it is observed that nursing professionals of the present and other studies have only one formal job. This can be understood as something positive because the accumulation of employments increases the susceptibility of the worker to stress due to long working hours and less leisure time.<sup>20</sup>

With regard to work shifts, it is noted that 42% of nurses work at night. This implies risk for the physical and mental health of professionals. On this, a study<sup>19</sup> conducted with 415 nursing professionals of the night shift at a hospital in Porto Alegre (RS) revealed that, despite the high level of satisfaction with their work, workers list disadvantages numerous related psychobiological aspects of sleep, aging and emotional wear. 10 Thus, the night work shift implications for the health professionals. These include daytime sleep without quality, premature aging, mental and emotional burnout and impaired social life. This directly and indirectly influences the productivity and quality of care provided by the worker at night. 20

The ICU environment is a potential setting for the occurrence of stress among the nursing staff and, in particular, among nurses, taking into account the severity and clinical

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instability of patients, 9,21 high workload and the need for decision-making. 2

However, regarding the stress level, it was observed that 54% of nursing professionals have low stress; nurses have high stress (22%) and nursing technicians have low stress (36%). Study with 15 SAMU nursing professionals of the SAMU in Guarapuava (PR) identified predominance of low stress level among all nursing technicians (100%) and among 88.9% of nurses. 22 It is known that stress is an individual phenomenon, but its consequences directly reflect on the dynamics of the team and on the provided assistance. Thus, a team of nurses with high levels of stress tends to provide poor care for patients, as their concentration, decision making, reasoning, reflexes and sensitive abilities compromised. Still, absenteeism, high turnover rates and emotional burnout are all possible results. The low level of stress presented by professionals in this research indicates that they are potentially protected from these effects of stress, with less risk of absenteeism and turnover.<sup>23</sup>

The analysis of the items of WSS scale showed that those with higher means, causing population, were: stress to the "Insufficient time to accomplish my workload makes me nervous" ( $\overline{\times}$  2.62; SD = 1.22); "Little prospect of professional growth in the career has distressed me" ( $\overline{\times}$  2.64; SD = 1.39); and "I feel irritated because I'm not appreciated by my superiors" ( $\overline{\times}$  2.66; SD = 1.15). In a study with 209 nursing professionals from a private hospital in the northwest of Rio Grande do Sul, the highest means were the same as those observed in the present investigation. These were: "Insufficient time to accomplish my workload makes me nervous" ( $\overline{\times}$  2.67; SD = 1.14); "I feel irritated because I'm not appreciated by my superiors" ( $\overline{\times}$  2.58; SD = 1.11); and "Little prospect of professional growth in the career has distressed me"  $(\times 2.58; SD = 1.06)$ . Insufficient time to work may cause discontent in nursing workers due to the conditions and difficulties experienced overwork. This wear affects psychological and physical condition of the individual, and may cause feelings dissatisfaction and anxiety.1 Little prospect of evolution in the career and the lack of appreciation from other team members can also cause anxiety and dissatisfaction of workers in terms of personal and working life.<sup>24-5</sup> A literature review in the Health Virtual Library with time frame of 2003-2013 reports that the satisfaction of professionals is mainly linked to the recognition of the work

performed and the exercise of their function, as well as the perspective of having opportunities to learn more and of professional growth offered by the institution, what ultimately reflects in the quality of care in these institutions. <sup>26</sup>

With regard to the items of the OCS with highest scores, the most often used strategy was the control factor ( $\overline{\times}$  3.77; SD = 0.55). A study with 54 nursing professionals from surgical units of a teaching hospital identified that 30% professionals used strategies focused on the problem, as is the case of Control.<sup>27</sup>

To solve a problem, it is necessary to identify it, enumerate it and compare it to the alternatives available, and implement the most appropriate action. Thus, the predominance of the control factor suggests that nursing professionals in the present research use strategies considered more resolutive, since they involve the direct confrontation of the stressor. Thus, the low level of stress observed in these professionals may be related to the use of control as a coping strategy. 1,27 This is because the control factor is one of the coping strategies focused on the problem that tend to minimize stress more effectively, which helps reducing the risk of negative outcomes of stress, such as burnout syndrome.<sup>28</sup>

# CONCLUSION

It was observed that nursing professionals working in ICU are predominantly female, single, with children and with sleeping hours below their individual needs. As for labor characteristics, there was a predominance of nursing technicians with experience in the health field, working in the night shift and with fixed schedule, without further employments, and who chose this area of expertise and are satisfied with the job.

Although this context can contribute to stress, nursing professionals with low intensity of stress predominated. This may be related to the prevalence of the use of strategies focused on the problem, considered more effective. However, when comparing the stress by professional category, it was observed that nurses have higher intensity of stress than other professionals of the nursing team. This may be related responsibilities involved in the nursing work process, such as care supervision, management of human and material resources, decision making, conflict management and direct care of complexity.

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One limitation of this study was the fact that this was a cross-sectional study, and it was not possible to confirm the causal link between the low-intensity stress and use of control as *Coping* strategy. Furthermore, this investigation did not analyze the possible effects of bio-social and labor variables on the intensity of stress and the adoption of *coping* strategies.

It is suggested that longitudinal studies be conducted so that most effective strategies for minimizing the stress of the nursing team working in intensive and semi-intensive care unit be identified. Still, the need for studies to assess the effect of bio-social and labor aspects of the phenomena discussed here is emphasized. This can be done through more complex analyses such as association and regression tests.

#### **FINANCIAL SUPPORT**

Institutional Program for Scientific Initiation Scholarships from the University of São Paulo/PIBIC/USP.

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Submission: 2015/09/09 Accepted: 2016/12/21 Publishing: 2017/02/15

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