



IMPACTS OF STRESS ON NURSING STAFF OF AN INTENSIVE CARE UNIT REFLEXOS DO ESTRESSE NA EQUIPE DE ENFERMAGEM DE UMA UNIDADE DE TERAPIA INTENSIVA

REFLEXIONES DEL ESTRÉS EN EL PERSONAL DE ENFERMERÍA DE UNA UNIDAD DE CUIDADO INTENSIVO

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ABSTRACT

Objective: to analyze the impacts of stress on the body of the nursing staff members from the ICU of a University Hospital in Natal-RN, Brazil. **Method:** qualitative research of descriptive approach held with members of the nursing staff of a university hospital in Natal, Brazil. The participants were twenty-one professionals as the inclusion criteria pre-established. Data collection happened through a semi-structured interview carried out with nursing professionals of this sector. These data were collected after the study was approved by the Research Ethics Committee of the Onofre Lopes University Hospital by CAAE No 0037.0.294.000-11. Data was analyzed through the thematic content analysis technique. **Results:** the categories that emerged from the analysis of participants' speech were: The body talks: Signs and Symptoms of Stress; and Working hours: impacts on the daily lives of the professionals. **Conclusion:** this study allowed us to realize that arduous working hours is a crucial factor in triggering diseases of body and mind of nursing professionals, the main signs are: physical and mental fatigue, insomnia, musculoskeletal pain, memory problems and chronic diseases. **Descriptors:** nursing; stress; occupational health.

RESUMO

Objetivo: analisar os reflexos do estresse no corpo dos membros da equipe de enfermagem da Unidade de Terapia Intensiva. **Método:** pesquisa qualitativa, de abordagem descritiva, realizada junto aos membros da equipe de enfermagem de um hospital universitário de Natal-RN, Brasil. Participaram 21 profissionais conforme os critérios de inclusão pré-estabelecidos: trabalhar na UTI do hospital do estudo há pelo menos seis meses; disponibilizar de tempo em participar da pesquisa voluntariamente; não estar em nenhum tipo de licença ou afastamento. A coleta de dados ocorreu nos meses de setembro e outubro de 2011 por meio de entrevistas semiestruturadas, realizada com os profissionais da enfermagem do referido setor. Em seguida, os dados foram tratados pelo Método de Análise de Conteúdo Temática. O projeto de pesquisa foi encaminhado e aprovado pelo Comitê de Ética e Pesquisa do Hospital Universitário Onofre Lopes, mediante o CAAE nº0037.0.294.000-11. **Resultados:** a partir da análise das falas dos sujeitos emergiram as categorias: *O corpo fala: sinais e sintomas do estresse; Jornada de trabalho: reflexos no cotidiano dos profissionais*. **Conclusão:** com a realização desse estudo foi possível perceber que uma jornada de trabalho árdua é um fator determinantes para desencadear as doenças do corpo e da mente dos trabalhadores de enfermagem, sendo os principais sinais disso o cansaço físico e mental, insônia, dores osteomusculares, problemas com a memória e doenças crônicas. **Descritores:** enfermagem; estresse; saúde ocupacional.

RESUMEN

Objetivo: analizarlos reflejos del estrés en el cuerpo de los miembros del personal de enfermería de la UCI de un hospital universitario de Natal-RN, Brasil. **Método:** investigación cualitativa, con enfoque descriptivo celebrada con los miembros del personal de enfermería de un hospital universitario en Natal, Brasil. Los participantes fueron veintidós profesionales como los criterios de inclusión preestablecidos. Los datos fueron recolectados a través de entrevista semiestructurada con profesionales de enfermería de ese sector. Estos datos fueron recolectados después de la aprobación del estudio por el Comité de Ética e Investigación del Hospital Universitario Onofre Lopes, según No 0037.0.294.000-11. Los datos fueron sometidos al análisis de contenido temático. **Resultados:** las categorías aprendidas a partir del análisis del discurso de los participantes fueron: El cuerpo habla: Signos y síntomas de estrés; Horas de trabajo: reflexiones sobre la vida cotidiana de los profesionales. **Conclusión:** con la finalización de este estudio, fue posible percibir que el trabajo duro es factor crucial para desencadenamiento de las enfermedades del cuerpo y de la mente del personal de enfermería, donde los principales signos son la fatiga física y mental; insomnio; dolor músculo-esquelético; problemas de memoria y enfermedades crónicas. **Descriptores:** enfermería; estrés; salud ocupacional.

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INTRODUCTION

The work activity directly involves mental and physical aspects of their workers, which may represent pleasure, satisfaction and balance. However, it may also be a source of several disorders such as stress, pain and, consequently, the worker's illness.¹

Among the psychological disorders that can affect the worker, we emphasize occupational stress. It consists in a set of phenomena that are present in the worker's body and which may affect his health.²

Thus, the constant presence of stress in the workplace leads to chronic stress, being responsible for the following disorders in the worker's body: professional dissatisfaction, psychosomatic exhaustion, absenteeism, reduced productivity, frequent accidents, premature aging, besides psychosomatic diseases.³

Thus, the profession that the worker performs is intrinsically related to the development of a picture of physical and mental stress, since it is in work that the individual mostly faces situations of emotional tension.

In this context, health professionals are highlighted, as they are inserted in a context of confrontation between health and sickness, life and death. And in this large group we emphasize the nursing team professionals, once they are in direct contact with patients, assisting them in direct health care.

Furthermore, the environment in which this care is performed has a strong influence on the development of stress on this team. With special reference to the Intensive Care Unit (ICU), after all, it is a sector with great technological devices where the professionals need specific knowledge to manipulate them. As well as hemodynamically unstable patients, patients that require direct care, constant attention and are totally dependent on the nursing staff for all their needs.

Thus, the articulation between the type of work and the profession performed may end up triggering a situation of occupational chronic stress, thus creating chronic health problems, evidenced by classic diseases such as hypertension, migraines, depression and indisposition at work. This can cause the nursing staff to decrease the productivity of care for patients, as well as impact their personal lives.

In the face of it, this study had as guiding question: What are the consequences of stress in the body of the members of the nursing staff of a University Hospital in Natal-RN? And

it had as objective to analyze the consequences of stress in the body of the members of the nursing staff of the ICU of a University Hospital in Natal-RN, Brazil.

METHOD

This was a qualitative study of descriptive approach that aimed to analyze the impacts of stress on the body of the nursing team members that compose the ICU of a University Hospital in Natal-RN, Brazil.

This method allowed the researchers to approach and understand the reality studied, enabling also a cross-check and integration between the literature approached and the research question, which showed a more complete and reliable approach between the perceptions of nursing team members of this ICU.⁴

Data collection occurred in September and October 2011, being carried out after the study was approved by the Research Ethics Committee of Onofre Lopes University Hospital - CEP-HUOL presenting CAAE No 0037.0.294.000-11.

Data collection happened through a semi-structured interview containing questions about the consequences of work in the body, both physical and psychological, during the work day and beyond. The study was composed of twenty-one (21) professionals of the team, with sixteen (16) nursing technicians and five (5) nurses. All were included on the following criteria: working in the ICU of the study hospital for at least six months, available time to participate in the study voluntarily, not being in any kind of license or removal.

To ensure the subjects' privacy on confidential data involved in the research, the interviewees were named in chronological order of the interviews and identified by nurse (N1, N2...) and nursing technicians (NT1, NT2...).

The collected data were transcribed and analyzed using the thematic content analysis technique.⁵ This method allows the systematic analysis of the speeches; the data synthesis according to the stages of pre-analysis, organizing initial ideas and preliminary systematizing the information collected; the analysis, coding the information through a thematic evaluation; and interpretation, when emerge the units of meaning in the interviews, which defined the issues that based the studies.⁵ After this process were created the categories of meaning of the impacts of stress in the body of professionals studied.

RESULTS AND DISCUSSION

During the interviews we traced the profile of interviewees by gender, age, marital status, and if they have two work shifts. With the tabulation and interpretation of these data, we verified that the majority of the population is female, 80% of professionals, aged between 30 and 39 years (52.3%), married (52.3%) and have a double employment (65.7%).

From the interviewees' statements we identified that stress is an element present in the professional life of the team studied. This fact brings direct consequences to the health of these workers as shown in the following categories of meaning: The body talks: Signs and Symptoms of Stress; and Working hours: impacts on the daily lives of the professionals.

♦ The body talks: Signs and Symptoms of Stress

Health professionals are constant victims of physical and psychological problems in the course of a workday or even after some time working in the area. These problems are mostly associated with the reality of the workplace, as also to the pace and loads of the workplace, that are potentially stressful.

This aspect of stress is mentioned by some authors^{3;6;7} as the most harmful to the health worker's body and mind. Among the most frequent physical symptoms are: increased sweating, muscle tension, tachycardia, hypertension, jaw tightness, teeth grinding, hyperactivity, nausea and cold hands and feet.⁶

Among the psychological aspects were listed: anxiety, tension, anguish, insomnia, alienation, interpersonal difficulties, doubts about himself, excessive worry, inability to concentrate on matters other than the stressor, impaired relaxation, anger and emotional hypersensitivity.⁶

These signs and symptoms are observed depending on the phase of stress the individual is experiencing. In this study, nurses and technicians have complained of problems with memory, tingling of limbs, constant tiredness, thinking on only one subject, irritability and emotional sensitivity.

This reality can trigger a series of harmful events to daily service of these workers, for instance, impaired patient safety, musculoskeletal pain, problems of coexistence among the team, emotional involvement with patients, among others.

Another important point worth mentioning is that the nursing technicians reported more

physical complaints, about 76.4%. While among nurses the predominant symptoms were psychological, about 57.1%.

This data refers to the actions that each professional performs in intensive care. The technical team performs procedures that involve greater physical effort, such as lifting and carrying the patient, the bed bath, among others. While nurses perform a task that stands out by the accumulation of administrative and bureaucratic tasks, pressure and demands from the directors and distance between the physical work and real work.⁸

In the interviewees' speeches, there are passages of how the work environment influences the health-disease of these nursing professionals:

Tiredness, tiredness [...] Because, well, you work in an ICU, in a critical sector where you have to... have to be ready to care for your patient, you have to come with a willingness to work. So, when you work in two ICUs it is much heavier. (NT2)

Yeah, I think the tiredness itself. Mostly leg pain, because I spend the day standing, standing in the morning with a student and the afternoon in the ICU [...] I think the tiredness... and mental stress too. Sometimes you get a little harsh, sometimes we are a little cruel, when answering something, I even think it is a result from those other factors. (N1)

Yes, my arm. If I'm very anxious, I feel very tense. Even if I'm not even picking up weight, if I am much stressed this here [referring to the shoulder] is about to explode and severe headache. (NT8)

In these reports, we verify that the physical exhaustion due to a working day is a constant in the interviewees' speeches. It is also evident the lack of leisure time, causing systemic effects and emotional and physical exhaustion in these professionals.⁹

This same fact was verified by a survey carried out with hospital nurses in an intensive care unit of São Paulo, where physical exhaustion appeared as predominant among these professionals. The study also shows that they feel exhausted, with little energy, and the impression they have is that they have no way to get back these energies.¹⁰

And as a consequence, professionals become little tolerant, easily irritated and angry in the workplace and with friends and family.¹⁰

These symptoms are seen often due the workloads in the intensive therapy environment. They can be defined as elements in the acting process that interact

with the professional's body, leading to changes in the biopsychic processes that manifest with the physical and psychological exhaustion potentially affected.¹¹

Regarding the loads present in daily intensive care, studies show that these are related to environmental characteristics, the number of professionals for each patient and the workplace organization. In intensive care, we can find those classified as chemical, as those with drugs; biological, as contact with sharps; and psychic, which depend on each professional, they all can cause stress directly into the worker's body.¹²

These factors directly influence the quality of patient care and the professionals' quality of life, as well as hospital costs resulting from nursing staff.

Another physical symptom that was found in the interviews is related to disturbances in the professionals' weight cycling, as we can see:

I gained 30 kilos over a period of approximately 3 to 4 years [...] the question of memory, too, the lack of memory ... (N3)

After I started working I put on about 20 kilos or more [...] throughout these 10 years, or 30 kilos, is a lot of weight, huh? So that's why I feel it emotionally and psychologically, I notice in my patience, sometimes I'm very angry. (N4)

I lost weight considerably in the last four years; I lost 4 kilos and never recovered ... (NT6)

This can be understood through the lifestyle of these professionals, since they do not help in maintaining a healthy diet or a regular practice of physical exercises, leading to weight gain or even weight loss.

This fact was evidenced in the literature, describing that stress contributes to change eating behaviors, which brings changes in weight, body mass index or cortisol activity, and this leads to a weight gain or loss, depending on the organism involved.¹³

In addition, stress can contribute to this weight gain, even if the person does not eat much, because there is an increase of cortisol, which stimulates the desire to eat and the proliferation of fat cells of the organism.¹⁴

Another problem mentioned by interviewees was the memory deficit. This symptom was also found in the literature: the difficulty in maintaining the preserved memory was present among the interviewees, regardless the working hours.¹⁵

Such symptoms are reflections of the cognitive effects of stress on the individual's organism, once when you're under stress the mind finds it difficult to stay focused,

increasing inattention and reducing the amplitude of short and long term memory.¹⁶

The fact is that health workers, especially those in nursing, often do not realize the harm that excessive work can cause in their physical and mental organism. Thus, the body ends up responding in several signs and symptoms, and may even reach the exhaustion and wear.

♦ Working hours: impacts on the daily lives of the professionals

In the nursing profession, overwork is most often a routine, due to a number of reasons, including: shift work, which leads to large consequences on workers' health, the increase in workload, and conditions of high professional effort, low reward and long-term commitment.^{18;19}

This reality was also confirmed in this study. From the five nurses interviewed, four have two work shifts. Among the nursing technicians, this reality is even more present, from the sixteen nursing technicians interviewed, eleven had two work shifts, and one reported having a triple journey.

This fact is evidenced in the literature, when mentioning that the accumulation of jobs is a characteristic of hospital nursing professionals in Brazil, and this can lead to negative effects for the service, such as increased risk for work accidents, and negative effects on care offered to patients.¹⁹

Overwork is capable of triggering in the nursing professionals immediate and long-term consequences. Among the immediate consequences stand out: the reduction of sleep time, symptoms of fatigue and depression, pain and several dysfunctions. And the long term are: inability to work and interference in the employer's family and care offered to the patients.²⁰

These effects were also seen in the interviewees' answers, as we can see:

Tiredness, tiredness... there, my choice to leave the other institution was precisely this. Because, well, it is too much [...] you work in an ICU, in a critical sector where you have to [...] have to be ready to care for your patient, you have to come with a willingness to work. So, so when you work in two ICUs is much heavier. (NT2)

I get home; sleep when I can, because sometimes I'm so agitated that it takes me to sleep ... (N3)

I think tiredness [...] some days you find yourself with heavy legs, I stopped having time for him (son), I stopped listening to him, and he sometimes asks me, then it affects me because of this. (NT6)

We found workers who reported the accumulation of workload, lack of family time, resulting in psychological distress that can generate mental disorders like anxiety and depression.

It is still mentioned as a source of psychological suffering to work in the hospital environment, since as a routine marked by illness, pain and death is faced by these professionals in more than one work shift. The increased contact with this environment, added to a high workload and an overload of activities, becomes an aggravator of stress in their professional environment and personal life.

In the reality studied we notice that there is excessive workload by nurses and nursing technicians. This often relates to work in another job of similar function, which means another intensive care unit.

This event causes physical and mental exhaustion when having to cope with the different spheres, creating conflicts and disagreements in the professional work environment and at home, besides triggering negative psychological aspects in these professionals.

Another important fact to report is that this overload routine of activities and roles highlights the increasing number of professionals affected by some occupational illness, as well as development of occupational stress and Burnout syndrome.

Researches show that living and working in a stressful environment and having to conciliate different roles and bonds consists in a stressful and exhausting process, making it necessary defense mechanisms, conscious or not, so that sickness and suffering of others do not interfere in the mental and physical health of the professional.²¹

CONCLUSION

The present study allowed the analysis and reflection about the consequences that occupational stress and arduous working hours can cause, both physically and mentally, on nursing professionals working in the ICU of a university hospital in Natal-RN.

These workers reported as consequences of stress: physical and mental fatigue, weight gain, insomnia, musculoskeletal pain, hypertension, memory problems, tingling of limbs, excessive irritability and emotional sensitivity.

Moreover, we realize from this study that the increase in working hours is a determinant factor for triggering diseases of employee's body and mind. Many times, these

professionals have a life devoted almost exclusively to the work day, which ends up restricting their leisure time, sleep, rest and other activities.

This brings direct consequences to the assistance provided by these professionals. Since physical and psychological complaints generate professional absenteeism, increased frequency of accidents and harm to health and well-being of these professionals in both the workplace and outside it.

The realization of this research has brought benefits to the population under study, once it enabled a reflection on how stress can manifest itself in the body of the team professionals and directly influence their health; leading to an awareness of these subjects on this fact, in order to arouse the necessity of preventing physical and mental illnesses in the workplace, having the responsibility to take care of themselves first for a better care to others.

It should be noted that this study was performed in a single context, characterizing actions and thoughts of a specific population, which led to similarities and differences with the reality in other institutions and locations, being necessary further studies on the subject to spread the horizons on the connection between stress and its impact on workers' health.

We need to think and perform ways to intervene in this situation, make the professionals to reflect and minimize the damage caused to them in their work environment, so they are able to understand their disease process in the workplace and discuss the issues concerning exhaustion, providing tools for these professionals for self-care.¹⁷

This will only be possible if these professionals begin to think about their work process and how this can interfere with the illness of their body and mind. Thus, there will be a greater awareness and a greater thought to engage and care of themselves in the professional environment.

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Sources of funding: No
Conflict of interest: No
Date of first submission: 2012/07/09
Last received: 2012/07/11
Accepted: 2012/07/12
Publishing: 2012/10/01

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