Factors Associated With Burnout Syndrome Among Emergency Room Nurses: A Systematic Review

Lucas Alves de Oliveira Lima¹, Ana Paula da Penha Alves², Gláucia Renee Hilgemberg³, Ana Flávia Costa Eccard⁴, Deise Gonçalves do Nascimento⁵, Adilson Gomes de Campos⁶, Hilton Giovani Neves⁷, Maria Amélia dos Santos Peres⁸

¹(Federal Rural University of Rio de Janeiro, Brazil)
 ²(Federal University of Pernambuco, Brazil)
 ³(UNISEP University Centre, Brazil)
 ⁴(Rio de Janeiro State University, Brazil)
 ⁵(Maurício de Nassau University Centre, Brazil)
 ⁶(University Centre of Várzea Grande, Brazil)
 ⁷(University of the State of Mato Grosso, Brazil)
 ⁸(University of the State of Mato Grosso, Brazil)

Abstract: The aim of this study was to analyze the factors associated with Burnout Syndrome among nurses in an Emergency Care Unit. To this end, a systematic review was carried out, following the PRISMA guidelines. The searches took place in the Pubmed, Scielo and Google Scholar databases, using specific terms, Boolean operators and inclusion/exclusion criteria for articles in Portuguese published between 2018 and 2023. As a result, it was found that burnout syndrome among UPA nurses is associated with organizational, personal and emotional factors. Work overload, combined with exposure to occupational risks, emerges as a significant cause of stress and emotional exhaustion among these professionals. In addition, depersonalization, caused by continuous stress, negatively affects relationships with patients and colleagues, damaging both the quality of care and the working environment. Individual factors such as gender, marital status and professional experience also play important roles in the manifestation of the syndrome. In addition, it has been observed that nursing professionals with low self-efficacy tend to develop burnout syndrome more. The Covid-19 pandemic has exacerbated these challenges, increasing nurses' workload and emotional stress.

Key Word: Burnout; Nurse; Emergency care unit.

Date of Submission: 03-09-2023

Date of Acceptance: 13-09-2023

I. Introduction

Professional Exhaustion Syndrome, commonly referred to as Burnout, has emerged as a phenomenon of growing concern in the field of occupational health, particularly among nursing professionals who work in high-demand and stressful environments, such as Emergency Care Units (UPAs). Burnout is characterized by a state of emotional exhaustion, depersonalization and reduced personal fulfillment at work, resulting in a general decline in the individual's mental and physical health (PÊGO; PÊGO, 2016).

The nursing profession is inherently challenging, demanding high levels of emotional involvement, complex interactions with patients and families, and the need to make quick decisions in critical situations. UPAs, as an integral part of the Brazilian health system, often operate under conditions of fast pace, scarcity of resources and long working hours, factors that can intensify nurses' exposure to the risk of Burnout (PAIVA et al., 2019).

In Brazil, concern about burnout among nurses has become an issue of great relevance due to the centrality of these professionals in the provision of health care and the growing awareness of the importance of the well-being of health workers. This is because the country has a significant contingent of nurses working in the various spheres of medical care, including Emergency Care Units (NOGUEIRA et al., 2018.

The crucial nature of the nursing profession on the front line of emergency care in UPAs puts them in direct contact with patients in critical states of health, which in turn increases the levels of pressure and stress associated with the job. Constant exposure to emergency situations and the need to offer emotional, physical and psychological support to patients and their families can take a significant emotional toll on nurses.

As Oliveira et al. (2015) reiterate, the intensity of emotions experienced in PACUs can be overwhelming, with nurses often facing ethical dilemmas, dealing with patients' pain and suffering and sometimes facing

unexpected losses. The emotional overload resulting from this constant exposure to critical situations can negatively impact nurses' personal lives, leading to difficulties in family and social relationships, as well as a gradual depletion of emotional reserves. Balancing professional demands with maintaining stable mental and emotional health can become a complex and debilitating challenge.

The issue of burnout among nursing professionals in UPAs is not restricted to the individual sphere; it has direct implications for the quality of health services provided to patients, as emotionally exhausted nurses can experience a reduction in empathy, thus compromising the quality of care they offer (SILVA et al., 2015).

Given these complexities, understanding the factors that contribute to the development of burnout among nurses in emergency care units is essential not only to protect the health and well-being of these dedicated professionals, but also to ensure the effectiveness and quality of care provided to patients in emergency situations. The aim of this study was therefore to analyze the factors associated with burnout among nurses in emergency care units.

II. Material And Methods

As for the methodology, this research was characterized as a systematic review, in order to obtain an indepth understanding of the factors associated with Burnout Syndrome among nurses in Emergency Care Units (UPAs). As a methodological approach that allows critical analysis, synthesis and compilation of existing studies on a specific topic (BRIZOLA; FANTIN, 2017), the systematic review provided a comprehensive overview of the current panorama of Burnout among nurses.

To carry out the systematic review, the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines were adopted, an internationally recognized protocol that establishes guidelines for conducting systematic reviews (BOTELHO; CUNHA; MACEDO, 2011). The PRISMA guidelines ensured that the process of selecting and analyzing studies took place in a systematic manner.

The works were collected from the PubMed, Scielo and Google Scholar databases. For this purpose, strategically chosen search terms were used to identify research related to Burnout among nurses in UPAs. The search terms included keywords such as "Burnout", "nurses" and "Emergency Care Units" and "factors". The search strategies included the association of keywords with Boolean operators "AND" and "OR", resulting in the following search sequence: ("burnout" OR "professional exhaustion") AND ("factors") AND ("nurse" OR "nursing") AND ("UPA" OR "emergency care unit").

The inclusion criteria were selected strategically to ensure that the studies chosen were directly relevant and contributory to the objectives of this research. The main focus of the inclusion criteria was on identifying and analyzing the specific factors associated with burnout syndrome among nurses working in Emergency Care Units (UPAs). This approach ensured that the selection of studies was precise and aligned with the scope of the research.

The restriction to the Portuguese language was adopted with the intention of maintaining cohesion and understanding of the results within the Brazilian context. Given that the study is centered on Brazilian PACUs, the selected articles needed to be available in the country's predominant language. This decision was also aimed at minimizing potential language barriers that could hinder the interpretation and analysis of the studies.

The publication period between 2018 and 2023 was chosen to cover a relevant and current time interval. This time window allowed the selected studies to be recent and reflect the current dynamics of UPAs in Brazil. The choice of this period also considered the possibility of capturing possible changes, developments and trends related to the factors associated with professional burnout in this context.

The exclusion criteria included the removal of abstracts, dissertations and theses in order to focus on complete studies that provided detailed information and in-depth analysis of the factors related to professional burnout among nurses in UPAs. In addition, articles published in countries other than Brazil, such as Portugal, Mozambique and Angola, were excluded to ensure that the results obtained were directly relevant to the reality of Brazilian UPAs.

The exclusion of duplicate articles was a measure to avoid repeating information and to maintain the integrity of the set of selected studies. Studies which were not directly related to the topic under study, i.e. which did not explore the factors associated with professional burnout among nurses in UPAs, were also excluded to ensure that only the most pertinent studies were included in the analysis.

After conducting the searches using the inclusion and exclusion criteria, the articles were analyzed. The analysis took place in two stages. The first was an initial screening, which involved reading the titles and abstracts of the articles. The second stage, in turn, constituted the complete screening, which involved the complete reading of the articles selected in the initial screening, corroborating what Galvão and Ricarte (2019) suggest. At the end of the screening process, 7 articles were selected, as shown in Figure 1.

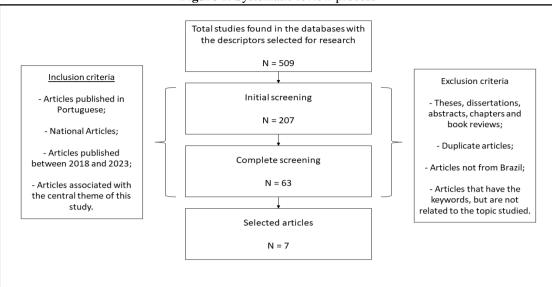


Figure 1. Systematic review process

Source: Research data (2023).

III. Result

The result of the systematic review was a sample of 7 scientific articles associated with the central theme of this study. Table 1 shows the articles selected in this systematic review.

Authors	Research title	Research objective	Type of research	Research conclusions
Resende, Lourenz o and Amorim (2021).	Profession al burnout among nurses at emergenc y care units (UPA) in Palmas/T O	Investigating professional burnout among nurses at the Emergency Care Units (UPA's) in Palmas/TO	A descriptive survey was carried out in 2019 with 51 nurses working in the South and North Emergency Care Units (UPA's) in the city of Palmas, Tocantins. The research approach was quantitative. Data was collected using a structured questionnaire containing information on age, gender, socio-professional data and answers to 22 items from the Maslach Burnout Inventory, used to assess professional burnout.	It was found that burnout among nurses in emergency care units stems from the need for multiple jobs due to financial precariousness, excessive workload, occupational risks and lack of autonomy. Sensitive personal characteristics and the emotional demands of the job also contribute, affecting mental health. Job dissatisfaction exacerbates the problem.
Teixeira et al. (2019)	Quality of life at work and occupatio nal stress among nurses in an emergenc y care unit	To evaluate and correlate quality of life at work and occupational stress in nursing staff at an Emergency Care Unit.	A cross-sectional and correlational study was conducted involving 109 nursing professionals working in the Emergency Care Unit in Minas Gerais, Brazil. The study used a questionnaire to collect demographic and work-related information, while occupational stress was assessed using the Job Stress Scale and quality of life at work was assessed using the Walton model.	The study found that several factors were associated with job dissatisfaction and burnout. These factors included having low support in the workplace, facing high demands or having an active job and having held the position for a longer period of time.
Ribeiro et al. (2020)	Influence of burnout syndrome on the quality of life of nursing profession als: a quantitativ e study	To estimate the prevalence and factors associated with burnout syndrome and quality of life among nursing professionals in an Emergency Care Unit.	This was a cross-sectional study of 83 professionals in emergency care units in Campina Grande-PB. The instruments included a characterization questionnaire, the Maslach Burnout Inventory scale and the SF-36. The analyses included descriptive and inferential statistics.	It was found that Burnout Syndrome among UPA nurses is influenced by factors such as the prevalence of exhaustion and depersonalization, which are more common in nurses than in technicians. It was also possible to observe the prevalence of the syndrome among women.

Table 1. Articles selected in the systematic review

F 4 1 1			D 17	4 G
Factors Associated	With Burnout Synd	rome Among Emer	gency Room Nurses	A Systematic Review
1 00101511550010100	The Build	i onite i intong Enter	Servey Room I was ses.	II bystematic Iterten

Lima et al. (2020)	Stress, burnout and hardiness among nursing profession als working in intensive and emergenc y care	To identify the presence of stress, burnout or hardiness in nursing professionals working in intensive and/or emergency care.	The study adopted a descriptive and quantitative approach, in which nursing professionals responded to validated instruments to assess the level of stress at work, the presence of burnout and the hardy profile.	Factors linked to burnout in nurses include prolonged professional activity, overload in care, high prevalence in mid-level professionals, depersonalization, low professional achievement and emotional exhaustion. There are associations with geographical factors and specializations. The "hardy" coping profile showed no clear relationship with burnout. The COVID-19 pandemic has intensified stress, highlighting the need for management strategies.
Paes et al. (2022)	Burnout syndrome in nursing profession als in emergenc y and intensive care units	To identify the existence of burnout syndrome among nursing professionals in the emergency department and adult intensive care unit of the University Hospital of Maringá.	The exploratory and descriptive study used a questionnaire with 22 questions from the Maslach Burnout Inventory scale to identify the dimensions of the burnout syndrome. The data was added up by dimension (exhaustion, depersonalization, professional accomplishment) and compared with reference values from the Burnout Studies Center.	The percentages found indicate the potential for burnout syndrome in different shifts and units, with nurses working in the adult ICU showing greater stress and chances of developing the syndrome. This finding is related to the greater demand for care on this shift, which is common in morning hospital routines.
Loiola and Martins (2019)	Self- efficacy at work and burnout syndrome in nursing profession als	To verify the relationship between self- efficacy and burnout in nursing professionals working in Emergency Care Units (UPA'S).	The study involved 82 nursing professionals. They answered three instruments: the Work Self-Efficacy Scale (WSE) developed by Martins and Siqueira (2010), the Burnout Characterization Scale (BSC) adapted by Tamayo and Tróccoli (2009) from the Maslach Inventory Burnout by Maslach and Jackson (1986), as well as a sociodemographic questionnaire.	Nursing professionals showed average levels of self-efficacy, exhaustion and low professional fulfillment in burnout, as well as low levels of depersonalization. There was a significant correlation between self- efficacy and two burnout factors: emotional exhaustion and disappointment at work. In short, nursing professionals with low self- efficacy are more likely to develop burnout syndrome.
Lopes, Santos and Giotto (2020)	Burnout Syndrome and its Effects on the Lives of Emergenc y Nursing Profession als	To analyze Burnout Syndrome and its effects on the lives of nursing professionals in urgent and emergency services.	This study carried out an integrative literature review covering the period from 2013 to 2019. Searches were conducted in the Lilacs, Scielo and Medline/Pubmed databases.	Burnout among nurses is related to factors such as emotional exhaustion, depersonalization and a sense of professional incompetence. Gender, marital status and professional experience also play important roles. Symptoms include emotional, physical and psychological exhaustion. The work environment, especially in emergency units, contributes to burnout

Source: Research data (2023)

Based on the conclusions of the selected works, it can be seen that burnout syndrome among nurses in Emergency Care Units (UPA) is multifactorial and complex, resulting from the interaction between organizational, personal and emotional factors. This complex interaction makes it clear that professional burnout cannot be attributed to a single cause, but rather to a combination of elements that directly affect nurses' mental health.

As evidenced in the studies by Resende, Lourenzo and Amorim (2021), Teixeira et al. (2019) and Lima et al. (2020), one of the preponderant factors is the excessive workload. This puts nurses in a vulnerable position, facing not only intense physical demands, but also significant emotional strain. Having an excessive workload creates an overload that goes beyond the physical aspect. The emotional and mental overload becomes just as substantial, since nurses have to deal with high patient demand and the constant pressure to make quick and accurate decisions in a high-stress environment.

The study by Paes et al. (2022) found that the overload and stress levels reported by nurses vary according to the shifts and units in which they work. The percentages found indicate a significant potential for the development of burnout syndrome in various shifts and hospital units. Notably, nurses working in adult Intensive Care Units (ICUs) have higher levels of stress and face greater chances of developing burnout syndrome.

This finding is directly related to the intensive and challenging nature of ICU work, which involves intensive care for critically ill patients. This intense demand for care, coupled with the complexity of clinical cases in ICUs, creates additional pressure on nurses working in these environments. In addition, it is common for ICUs to have a higher workload during the morning shifts due to the need for continuous monitoring of patients after dark. This higher demand for care and the resulting pressure can contribute to higher levels of stress and an increased chance of developing burnout syndrome among nurses.

Work overload is aggravated, according to Resende, Lourenzo and Amorim (2021), by exposure to occupational risks, common in emergency environments, which increase the pressure on these professionals. Direct contact with patients in critical situations, as well as the possibility of facing traumatic events and contagious diseases, puts nursing professionals at physical and emotional risk. The lack of adequate safety measures and psychological support can aggravate this exposure, increasing stress levels and contributing to the development of burnout.

In this way, exposure to occupational risks, common in UPAs due to the emergency nature of care, adds an additional layer of overload. In this sense, dealing with emergency situations, critically ill patients and quick decisions in an environment of high emotional pressure becomes extremely stressful. The stress generated by these circumstances contributes directly to emotional exhaustion, affecting both the physical and mental health of nurses.

The studies by Lima et al. (2020), Ribeiro et al. (2020) and Lopes, Santos and Giotto (2020) highlight that depersonalization is another critical dimension of burnout syndrome among nurses in Emergency Care Units (UPAs). Depersonalization refers to the distant and insensitive attitude that nurses develop towards patients and co-workers. Thus, it was found that depersonalization is a response to the chronic stress and emotional exhaustion that nurses face in their work environment. When they are overwhelmed by an excessive workload, intense emergency situations and quick decisions under pressure, they can lose the ability to connect emotionally with patients.

Faced with the depersonalization of nurses, patients are perceived as clinical cases, rather than individuals with needs, feelings and concerns. Emotional disconnection is not a conscious choice, but a factor associated with burnout. Empathy and compassion, which are essential qualities in health care, are undermined by depersonalization. This not only negatively affects the quality of care provided, but also contributes to a less harmonious working environment, where communication and collaboration between the healthcare team can be impaired.

The study by Ribeiro et al. (2020) also found that gender plays a relevant role in burnout syndrome among nurses in Emergency Care Units (UPAs). The syndrome was found to be more prevalent among female nurses, which is attributed to a number of factors, such as gender inequalities in the workplace and the double workday, due to the burden of responsibilities outside of work.

The analysis of the influence of gender on burnout syndrome among nurses in Emergency Care Units (UPAs), as observed in the study by Ribeiro et al. (2020), reveals a complex and multifactorial dynamic that affects the mental health of nursing professionals. This finding reflects not only the importance of raising awareness about gender issues in the workplace, but also the need to implement measures that can mitigate these impacts and promote a healthier working environment.

In addition to gender issues, Lopes, Santos and Giotto (2020) pointed out in their study that marital status and professional experience also play significant roles in burnout syndrome among nurses in Emergency Care Units (UPAs). These additional factors add complexity to understanding the elements that contribute to professional burnout in this work environment.

With regard to professional experience, newly graduated nurses are particularly susceptible to stressors in the workplace due to their lack of day-to-day experience and initial idealism about the job. Newly graduated nursing professionals enter the profession with high expectations and, when faced with the reality of the UPAs, which often involves intense situations and critical decisions, they feel overwhelmed and discouraged. This initial experience is challenging and consequently leads to the development of burnout syndrome.

On the other hand, nurses with long years of experience face different challenges. Although they have acquired a valuable set of skills and knowledge over the years, they may be faced with the wear and tear that comes with leading the healthcare team and spending a long time interacting with patients. Nurses with more experience may feel responsible not only for the direct care of patients, but also for mentoring less experienced colleagues. This creates additional pressure and a sense of responsibility that contributes to burnout.

With regard to marital status, the stability generated by the emotional satisfaction of being a father, mother or responsible for a family is characterized as an external factor that contributes to lower stress levels in married people. This implies that married professionals can find some emotional support and balance in their personal lives, which can help mitigate burnout.

It should also be noted that studies such as that by Loiola and Martins (2019) highlight the importance of self-efficacy in the context of burnout. Analyzing the relationship between self-efficacy and burnout in nursing

professionals is extremely important in the context of occupational health and the well-being of these professionals, since nurses with low self-efficacy, i.e. with a lower belief in their ability to cope with the demands of the job, tend to develop burnout syndrome more.

Nurses with low self-efficacy face additional challenges in their work environment. Professionals who have a lower belief in their own ability to cope with the pressures and demands of the job can experience a greater sense of powerlessness, lack of control and hopelessness in relation to their professional abilities. This feeling of ineffectiveness can translate directly into the components of burnout, such as emotional exhaustion, depersonalization of patients and the perception of professional incompetence.

Self-efficacy also influences the way nurses relate to patients. Depersonalization, which involves cold and distant attitudes towards patients, is less likely in nurses with high self-efficacy. Those who believe in their ability to care effectively tend to maintain greater empathy and compassion, even in stressful situations.

Last but not least, it is worth mentioning that the Covid-19 pandemic was a factor that contributed to aggravating the recurrence of Burnout Syndrome among nurses, as Lima et al. (2020) point out.

The Covid-19 pandemic has placed extraordinary demands on healthcare systems around the world. In this scenario, nurses in emergency care units have played a crucial role on the front line, facing high volumes of infected patients, long working hours and extremely stressful conditions. This constant pressure and continuous exposure to traumatic situations, such as the suffering and death of patients, has created a highly challenging and emotionally exhausting work environment for these healthcare professionals.

The pandemic has imposed a number of additional challenges on nurses, as they have had to deal with a lack of adequate protective equipment, uncertainty about their own health and the health of their loved ones, as well as the constant fear of being infected by the virus. These concerns not only increased stress levels, but also contributed to the nurses' emotional and psychological exhaustion.

Another important aspect to consider is work overload. With the high demand for medical care during the pandemic, many nurses have had to take on more responsibilities than usual, working overtime and sometimes being overworked due to staff shortages. This excessive workload, combined with emotional tensions, has further increased the risk of burnout among these health professionals.

IV. Conclusion

Based on this systematic review, it was found that the studies analyzed reveal a complex and multifaceted picture of burnout syndrome among nurses in Emergency Care Units (UPAs). Burnout syndrome is not caused by a single isolated factor, but by an association of variables including organizational, personal, emotional and environmental factors. The excessive workload, combined with exposure to occupational risks, creates significant pressure on these professionals, increasing stress levels and contributing to emotional exhaustion.

Depersonalization, resulting from chronic stress and emotional exhaustion, affects the way nurses relate to patients and their colleagues, damaging the quality of care and the work environment. In addition, factors such as gender, marital status and professional experience play significant roles in the manifestation of the syndrome, highlighting the need to consider the diversity of these professionals when addressing occupational health issues.

Nevertheless, self-efficacy emerges as an important factor in preventing burnout, influencing not only the ability to cope with the demands of the job, but also empathy and compassion in caring for patients. Finally, the Covid-19 pandemic has further exacerbated the challenges faced by PACU nurses, increasing their workload, exposure to risks and emotional stress.

Faced with this complex and multifactorial scenario, it is essential that health institutions and managers adopt proactive measures to mitigate the risks of burnout among nurses. This includes implementing workload management strategies, providing adequate psychological support, promoting a healthy work environment and valuing professionals' self-efficacy. Awareness of gender issues in the workplace and consideration of personal factors, such as marital status and professional experience, should also be taken into account when developing effective interventions to prevent and treat Burnout syndrome among nurses in UPAs.

References

- Botelho, L. L. R.; Cunha, C. C.A.; Macedo, M. The Integrative Review Method In Organizational Studies. Gestão E Sociedade, 5(11), 121, 2011.
- [2]. Brizola, J.; Fantin, N. Literature Review And Systematic Literature Review. Revista De Educação Do Vale Do Arinos Relva, 3(2), 2017.
- [3]. Galvão, M. C. B.; Ricarte, I. L. M. Systematic Literature Review: Conceptualization, Production And Publication. Logeion: Philosophy Of Information, Rio De Janeiro, Rj, V. 6, N. 1, P. 57-73, 2019.
- [4]. Lima, A. L. Et Al. Stress, Burnout And Hardiness Among Nursing Professionals Working In Intensive And Emergency Care. Revista De Administração Hospitalar E Inovação Em Saúde, Vol. 17, N. 3, Belo Horizonte, 2020.
- [5]. Loiola, E.; Martins, M. C. Self-Efficacy At Work And Burnout Syndrome In Nursing Professionals. Revista Psicologia, Saúde E Doenças, V. 20, N. 3, 2019.
- [6]. Lopes, D. F.; Santos, R. B.; Giotto, A. C. Burnout Syndrome And Its Effects On The Lives Of Urgency And Emergency Nursing Professionals. Reicen - Journal Of Scientific Initiation And Extension, V. 3, N. 1, 2020.

- [7]. Nogueira, L. S. Et Al. Burnout And The Work Environment Of Nurses In Public Health Institutions. Reben Brazilian Journal Of Nursing, 2018.
- [8]. Oliveira, S. N. Et Al. Emergency Care Unit Upa 24h: Nursing Perception. Texto Contexto Enferm, Florianópolis, Jan-Mar; 24(1): 238-44, 2015.
- [9]. Paes, J. L. Et Al. Burnout Syndrome In Nursing Professionals In Emergency And Intensive Care Units. J Bras Psiquiatr., 2022;71(4):296-302, 2022.
- [10]. Paiva, J. D. M. Et Al. Triggering Factors Of Burnout Syndrome In Nurses. Rev. Enferm., 13(2): 483-490, 2019.
- [11]. Pêgo, F. P. L.; Pêgo, D. R. Burnout Syndrome. Rev Bras Med Trab, 2016.
- [12]. Resende, M. R.; Lourenzo, M. A. R.; Amorim, M. S. Professional Burnout In Nurses At Emergency Care Units (Upa) In Palmas/To. Revista De Patologia Do Tocantins, 8(3), 75-81, V. 8, N. 3, 2021.
- [13]. Ribeiro, E. K. A. Et Al. Influence Of Burnout Syndrome On The Quality Of Life Of Nursing Professionals: A Quantitative Study. Rev. Bras. Enferm., 2020.
- [14]. Silva, R. P. Et Al. Burnout And Coping Strategies In Nursing Professionals. Arquivos Brasileiros De Psicologia, V. 67, N. 1, 2015.
- [15]. Teixeira, G. S. Et Al. Quality Of Life At Work And Occupational Stress Of Nurses In An Emergency Care Unit. Texto & Contexto Enfermagem, V. 28, 2019.