

Burnout, satisfaction and compassion fatigue: relationship with quality of care and patient safety

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Abstract

Nurses who work in hospital care deal with physical and emotional pain, highly complex situations, exposure to suffering, fear, stress and anxiety, which favors the development of compassion fatigue, which is considered a form of suffering resulting from work activity. and can compromise the health and well-being of nurses, as well as patient safety. The objective was to relate compassion fatigue with aspects of the quality of healthcare and patient safety. This was an exploratory, quantitative, correlational study, carried out between May and June 2021. Data collection took place through an online questionnaire after approval from the Research Ethics Committee and consent from the participants. The sample consisted of 410 nurses who worked in three private hospitals in São Paulo; 319 (78%) were female, 212 (51.71%) had worked in hospitals for 4 to 10 years. Positive correlations were obtained between high rates in the compassion fatigue and burnout dimension of the ProQol-Br questionnaire and aspects related to quality of care and patient safety (p<0.001). The nurses agreed that due to work overload and mental exhaustion, they failed to fully comply with quality and patient safety protocols, which could increase the occurrence of adverse events. The relevance of developing strategies to improve work overload was highlighted, through the adequacy of human resources, satisfaction and professional recognition, in order to minimize the occurrence of compassion fatigue and have a positive impact on the quality of care and patient safety.

Keywords: Compassion Fatigue. Patient safety. Quality of Health Care. Nursing Care.

INTRODUCTION

In Brazil, Nursing accounts for approximately half of the healthcare workforce and represents more than 2 million professionals¹. It is known that these professionals constantly deal with physical and emotional pain, situations of a high degree of complexity and severity and, often, with precariousness in the work environment². In this way, they are exposed to situations of suffering, fear, stress and anxiety, factors that contribute to worsening mental health².

In the work environment, stress is called





occupational stress and is characterized by wear and tear resulting from the work environment and work activity, which makes it impossible for the individual to adapt to the psychological demands that exist in their work or life environment³. Nurses are constantly exposed to traumatic situations, with risks to their lives and involvement with the patient's suffering, and can be affected by negative health effects such as burnout, and secondary traumatic stress impacting their quality of life⁴.

According to Stamm⁵, quality of professional life incorporates two aspects, one positive and one negative, respectively called compassion satisfaction (CS) and compassion fatigue (CF). The positive aspects are related to altruism, a feeling of well-being resulting from the pleasure obtained through the professional activities carried out and the feeling of satisfaction when helping people and contributing to a healthy work environment⁶. The negative effects of providing care are caused by the severity of clinical situations and trauma that professionals are exposed to and end up presenting symptoms such as exhaustion, frustration, anger and depression typical of burnout, which can affect the individual, their family, and other people. close to their work activities⁶.

Excessive workload, professional dissatisfaction and stress are risk factors that impact the quality of professional life, causing worker illness, absenteeism, errors and carelessness, which cause negative outcomes in the organization of care and quality of assistance provided, reflecting on the patient safety⁷.

The safety and well-being of healthcare professionals are focuses of attention, due to the demands of their activities, the relationship with their productivity and sustainability of organizations, as well as the impact on patient safety, which is defined as the reduction of risks and unnecessary harm associated with health care to an acceptable minimum⁸. Because of this, this theme has been the target of global health programs and policies^{8,9}.

The excessive workload of nursing professionals is negatively related to the quality of care provided and the increase in the frequency of adverse events in healthcare organizations¹⁰. In view of the above and aiming to provoke a timely discussion and awareness among professionals and managers, this study aimed to relate compassion fatigue, burnout and compassion satisfaction with aspects of the quality of healthcare and patient safety.

MATERIAL AND METHODS

This was a correlational, exploratory research with a quantitative approach, carried out in three private hospital institutions, located in the city of São Paulo-SP, which have national and international accreditation.

The three hospital units together had more than 750 beds and offer assistance in various clinical and surgical specialties in inpatient units, intensive care units and adult and pediatric emergency care, diagnostic center, hemodynamics, in addition to other specific areas. They had 655 nurses, who worked in the care and management areas.

All professionals with a nursing degree, from all shifts and work units, who had at least one year of experience as nurses in the aforementioned hospital institutions and who agreed to participate in the study by signing





the Consent Form were included in the research. Free Clearance (TCLE). Professionals with less than a year of experience as nurses in the participating hospital institutions were excluded from the research, in addition to those on vacation or leave during data collection, constituting 410 participants.

To collect sociodemographic data, a questionnaire prepared by the authors was used with variables related to age, sex, marital status, time since graduation, title, time working at the institution, work shift, work unit and function or position.

Compassion fatigue was assessed using the ProQol-BR questionnaire. This instrument was developed by Stamm and originated from the American version of the Compassion Satisfaction and Fatigue Test (CSFT) developed by Figley C. R.5. The version translated and validated into Brazilian Portuguese contains 28 items, grouped into three subscales that assess compassion satisfaction, compassion fatigue and burnout using a Likert scale that varies from 1 = Rarely/never, to $5 = \text{Very frequent}^{11}$. It was decided to distribute the 28 items of the Brazilian scale into the three subscales, according to the original instrument, in order to maintain the recommendations for the assessments of the items and subscales. The use of this instrument was authorized by the authors.

The authors developed an instrument with five statements in the Likert scale for-

mat, with variations between: I completely agree; I partially agree; I neither agree nor disagree; partially disagree and; I completely disagree to collect data that related the work environment, rest, work overload, physical and mental exhaustion with aspects concerning quality of care and patient safety.

Data collection was carried out in May and June 2021 and began after approval by the Research Ethics Committee (Opinion No. 4.567.780) of the higher education institution and the hospitals where this study took place. Participants who agreed to participate in the study did so by agreeing to the informed consent form made available with the data collection instruments through a link sent by the researchers to the nursing managers of the institutions where this study took place.

The data were tabulated and stored in an Excel spreadsheet and, subsequently, descriptive analyzes of the study variables and association tests with the ProQol-BR subscales were carried out, using the Statistical Package for Social Science (SPSS) the correlation was carried out between the dependent variables (three ProQoL subscales: compassion satisfaction, compassion fatigue and burnout) with the ordinal variables (statements that related the work environment, rest, work overload, physical and mental exhaustion with aspects concerning quality of care and patient safety), using the Kendall coefficient.







RESULTS

The sample consisted of 410 nurses, 319 (78%) were female, 90 (22%) were male and one (0.24%) did not report; 282 (68.77%) declared themselves married/in a stable union, 39 (9.51%) divorced, 86 (20.98%) single and three (0.73%) widowed.

Regarding working time at the institution, counting professionals from the three institutions, 116 (28.29%) reported 1 to 3 years, 212 (51.71%) 4 to 10 years and 82 (20%) more than 10 years. The adult hospitalization unit is the sector with the largest number of professionals who participated in the research, 103 (25.12%), followed respectively

by the adult Intensive Care Unit (ICU) with 92 (22.44%) and the Emergency Room (ER) adult with 73 (17.80%). Regarding working hours, 185 (45.12%) worked with a 12x36 schedule during the day and 139 (33.90%) during the night, 60 (14.63%) during the full time, 18 (4.39%) during the morning and 7 (1.71%) in the afternoon.

Table 1 presents the correlations between the dependent variables that were composed of the ProQoL-BR subscales: compassion satisfaction, compassion fatigue, burnout and ordinal variables, composed of statements related to quality of care and patient safety.

Table 1 – Correlations of the three dimensions of the ProQol-BR questionnaire with the assertions of quality of care and patient safety. São Paulo/SP, Brasil, 2022.

ProQol Dimensions	Assertives	N	cor	Inf.CI	Sup.Cl	p-value*
Compassion satisfaction	Work overload of nursing professionals increases the occurrence of adverse events	410	-0.075	-0.171	0.022	0.064
Compassion satisfaction	Having moments of rest at work influences adequate compliance with patient safety protocols	410	-0.003	-0.099	0.094	0.948

to be continued...



... continuation Table 01

ProQol Dimensions	Assertives	N	cor	Inf.Cl	Sup.Cl	p-value*
Compassion satisfaction	A favorable work environment contributes to lower rates of adverse events	410	0.074	-0.023	0.170	0.072
Compassion satisfaction	Failed to fully comply with a patient safety protocol due to work overload	410	-0.176	-0.268	-0.080	< 0.001
Compassion satisfaction	Failed to fully comply with a patient safety protocol due to mental exhaustion	410	-0.197	-0.289	-0.102	< 0.001
Burnout	Work overload of nursing professionals increases the occurrence of adverse events	410	0.166	0.070	0.259	< 0.001
Burnout	Having moments of rest at work influences adequate compliance with patient safety protocols	410	0.061	-0.036	0.157	0.122
Burnout	A favorable work environment contributes to lower rates of adverse events	410	-0.037	-0.133	0.060	0.370
Burnout	Failed to fully comply with a patient safety protocol due to work overload	410	0.295	0.204	0.381	< 0.001

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ProQol Dimensions	Assertives	N	cor	Inf.Cl	Sup.Cl	p-value*
Burnout	Failed to fully comply with a patient safety protocol due to mental exhaustion	410	0.299	0.208	0.384	< 0.001
Compassion fatigue	Work overload of nursing professionals increases the occurrence of adverse events	410	0.233	0.139	0.322	< 0.001
Compassion fatigue	Having moments of rest at work influences adequate compliance with patient safety protocols	410	0.061	-0.036	0.157	0.120
Compassion fatigue	A favorable work environment contributes to lower rates of adverse events	410	0.011	-0.086	0.108	0.789
Compassion fatigue	Failed to fully comply with a patient safety protocol due to work overload	410	0.298	0.207	0.384	< 0.001
Compassion fatigue	Failed to fully comply with a patient safety protocol due to mental exhaustion	410	0.336	0.247	0.419	< 0.001

*Kendall's rank correlation tau.

N = number; cor. = correction; Inf.CI = lower limit of the confidence interval; Sup.CI = upper limit of the confidence interval.





The variables "Having moments of rest at work influence adequate compliance with patient safety protocols" and "A favorable work environment contributes to lower rates of adverse events" did not present statistical significance in the correlation with Compassion satisfaction, burnout and Compassion fatigue.

It was possible to identify that the variables "Work overload of nursing professionals increases the occurrence of adverse events" showed a weak negative correlation with Compassion Satisfaction, with the p value (0.064); while in the variable burnout and compassion fatigue, there was a positive correlation with a p value < 0.001.

The variables "Failed to fully comply with a patient safety protocol due to work overload" and "Failed to fully comply with a patient safety protocol due to mental exhaustion" showed negative correlations with Compassion Satisfaction and positive correlations with burnout and fatigue due to compassion, presenting p values < 0.001.

DISCUSSION

Regarding the sociodemographic data of the participants in this study, there was a predominance of females. Historically and socially, nursing is predominantly made up of female professionals, this fact can be explained by the religious origin of the profession and the attribution of care for sick people, elderly people and children being the responsibility of women. However, in recent decades, it is possible to observe the increasing participation of men in nursing¹².

Regarding marital status, the majority of participants were married or in a stable union. Marital relationships are associated with security, quality of life and health. A stable emotional relationship can contribute to a lower propensity for burnout¹³.

With regard to working time at the institution, there was a prevalence of a range of 4 to 10 years (N=212; 51.71%). Corroborating the data found in this study, other authors pointed out that the shorter training time influences the increase in the level of emotional exhaustion and fatigue due to the process of adapting to the new routine and the responsibilities involved in care⁹. Professionals with less than 10 years of service tend to experience higher levels of stress, insecurity and professional immaturity when faced with the reality of work and expectations^{14,15,16}. Regardless of the area of activity, nursing professionals experience different situations considered potential stressors related to professional performance, mainly in Intensive Care Units (ICU) and Emergency Rooms (ER)¹⁷.

In this study, 40.24% of participants (N=165) worked in the ICU and Adult Emergency Care, which are critical units and recognized for having high sources of stress and complexity, in addition to being highly specialized. Incessant work associated with work overload and the environmental conditions specific to these sectors, such as temperature, noise, lack of external vision, artificial lighting and access control, can lead to emotional exhaustion and lead to a greater risk of stress¹⁸.

There was a predominance of professionals who worked with a 12x36 shift during the day (N=185; 45.12%), followed by night shifts (N=139; 33.90%), with those who work at night having more chances of exposure to occupational stress resulting from changes in the circadian rhythm that can lead to fatigue,





sleep problems, irritability, gastrointestinal disorders, obesity and reduced professional performance. In addition to physiological complications, there are also consequences for social and family life¹⁹.

Hospital health services combine several factors that lead to stress and functional illness. In these institutions, nursing work is characterized by an excessive workload and precarious working conditions, favoring dissatisfaction, causing stressful situations that can harm professional practice²⁰.

When analyzing the Compassion Satisfaction variable, a negative and significant correlation (p<0.001) was obtained in the statements "failed to fully comply with a patient safety protocol due to work overload", as well as "failed to fully comply with a patient safety protocol due to mental exhaustion". Compassionate satisfaction refers to the pleasure that professionals feel when carrying out their work, helping patients with their needs, feeling good in their interpersonal relationships with their colleagues and their ability to contribute to the work environment or even to the greater good of society². It can be developed through the empathetic relationship established with the patient or family; peer support; development of resilience and coping mechanisms and practice of self-care². Furthermore, professional satisfaction has been shown to be a protective characteristic against the occurrence of adverse events and professional illness²¹.

Thus, it is possible to infer that nursing professionals who present high compassion satisfaction establish greater bonds with the patient, family and work team and greater engagement in the care processes and protocols of the health institutions in which they work, which contributes to better outcomes in the quality of care and patient safety.

The burnout dimension showed a positive and statistically significant correlation with work overload and the occurrence of adverse events (p<0.001), as well as the statements: failing to fully comply with a patient safety protocol due to work overload and mental exhaustion.

Burnout syndrome involves a prolonged response to chronic interpersonal stressors in the work environment and is one of the problems that can occur among professionals who provide health care²². Occupational stress is a consequence of the way people face challenges at work and the intensity of responses to these challenges²³. Furthermore, burnout can lead to the professional becoming distant from the patient, which compromises the quality of care and patient safety²¹.

Work overload, punitive behavior upon failure, communication problems between the team and managers are some of the factors that contribute to the increased occurrence of adverse events related to burnout syndrome in nursing professionals²¹.

A study found that burnout was negatively associated with patient safety, as it led to an increase in rates of adverse events such as falls, errors in the preparation and administration of medications, and healthcare-related infections²⁴. Another research with similar results pointed out the relationship between high levels of emotional exhaustion among nurses and decreased attitudes towards patient safety²⁵.

Compassion fatigue has been recognized for many years and refers to feelings of exhaustion, frustration and emotional exhaustion related to work and has been considered a serious threat to the mental health of nurses and other healthcare professionals^{5,26}.

The frequency of compassion fatigue varies depending on the work unit and can influence clinical and organizational outcomes. Several studies have found worrying levels of compassion fatigue that suggest the need for organizational measures to improve the quality of professional life of nurses, also aiming to improve the care provided^{26,27}.





In the present study, also conducted in a hospital environment, a significant positive correlation was observed between the dimension of compassion fatigue in nurses who, for the most part, agreed that they failed to fully comply with any patient safety protocol due to work overload and mental exhaustion, which increases the occurrence of adverse events.

Considering the frequency and severity of compassion fatigue and its repercussions on the work process, several coping strategies have been recommended for health professionals, among which the following stand out: self-care, spiritual assistance, mindfulness training and focused coping exercises in resilience and empathy⁷.

Therefore, the recognition that the dimensions of burnout, compassion fatigue and compassion satisfaction can influence the quality of life of nurses and their work process, it is essential to establish effective intervention strategies, on the part of the health institution, managers and of the professionals themselves, which may have an impact on safe and qualified care for the patient.

CONCLUSION

It was possible to identify that the dimensions of burnout and compassion fatigue had a positive correlation. It was possible to identify that the dimensions of burnout and compassion fatigue had a positive correlation with work overload and increased occurrence of adverse events, as well as mental exhaustion contributing to non-fulfillment of patient safety protocols. On the other hand, high levels of compassion satisfaction among nurses resulted in a negative correlation when they failed to fully comply with any patient safety protocol, due to mental exhaustion.

Based on the results of this research, the relevance of developing strategies to improve working conditions and, consequently, nurses' job satisfaction rates is emphasized, through the adequacy of human, material and structural resources, effective communication and recognition professional, which could have a positive impact on the quality of care and patient safety.

CREdiT author statement

All authors read and agreed to the published version of the manuscript.



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