

QUALITY OF LIFE, PREVALENCE OF BURNOUT SYNDROME AND DAYTIME SLEEPINESS IN DOCTORS RESIDENTS IN THE CITY OF MANAUS

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Abstract: Introduction: Quality of life is essential for professionals who deal with lives. Medical residency has an excellent concept of medical training, but suffers from several criticisms in the resident doctor's quality of life requirement, due to a sudden change in their lifestyle and a work pace increased by the workload required by the medical residency legislation. Objective: The main objective of this work is to analyze the Quality of Life, the prevalence of Burnout Syndrome and Daytime Sleepiness in resident doctors of several medical specialties: Internal Medicine, General Surgery, Anesthesiology, Otorhinolaryngology, Orthopedics and Gynecology and Obstetrics in a hospital of reference in Manaus. Propose the structuring of the Support Center for Resident Doctors and Preceptors (NAMP) with the objective of implementing programs to improve the quality of life of resident doctors, research and training of preceptors. Method: The following questionnaires were applied: 1. Quality of life assessment (WHOQOL) by the World Health Organization (WHO); 2. Epworth Sleepiness Scale (ESS) to assess daytime sleepiness; and 3. Maslach Burnout Inventory (MBI). According to Maslach's criteria, Burnout was studied in its dimensions: emotional exhaustion, depersonalization and personal fulfillment. Results: It was identified that the Burnout Syndrome has a prevalence of 77.42% in the studied resident doctors. As for the self-assessment of quality of life, using the WHOQOL - Bref. of these doctors. Regarding sleepiness levels during the day, a value of 13.21 was found for the group of resident doctors studied. Conclusion: The results suggest that Burnout is related to exposure to stressors in working conditions. Therefore, a preventive approach to these factors that have a negative impact on the health of medical residents is necessary. In this sense, the structuring of the NAMP is proposed.

INTRODUCTION

The Medical Residency (RM) was created in the United States, in 1889, by William Stewart Halsted, as an educational system of in-service training; in Brazil, it was implemented between 1944 and 1945. Despite suffering several critical questions related mainly to the adequate supply of qualified supervision and the potential deleterious effects of the workload on workers' health, it has been recognized as the best professional training system doctor (MARTINS, 2010).

Learning in MRI takes place through a process based on supervised medical practice, in which the preceptor guides, exchanges knowledge and experiences and offers subsidies so that the student can produce a structuring of the line of clinical thinking (SPONHOLZ et al., 2016).

The Adriano Jorge Hospital Foundation (FHAI), located in the city of Manaus – Amazonas, is an institution that is part of the indirect administration of the Executive Power, linked to the Amazonas State Health Secretariat (SUSAM). Its primary purpose is the health care of the population that uses the Unified Health System (SUS). In 2005, he achieved a great achievement when he started the Medical Residency Program in the following specialties: Clinical Medicine, Clinical Surgery, Orthopedics and Traumatology, Anesthesiology and Otorhinolaryngology, being one of the 154 hospitals recognized by the Ministries of Health and Education as teaching, or auxiliary to teaching, through Interministerial Ordinance Number: 747/2008 – MEC/MS (ABRAHUE, 2019).

The Medical Residency Program at FHAI began in 2005, offering 20 vacancies, and today it has 66 vacancies, which characterizes a gradual growth in the offer of vacancies over the years. As a result, it has a significant number of residents working annually at the

institution, having trained, by the year 2019, 234 new specialist doctors at the service of Brazilian society and, mainly, of Amazonian society (ABRAHUE, 2019).

During medical training, residency is one of the most stressful phases, especially in the first year of training, when it exposes the young doctor to suffering and realities that can cause undesirable behavioral changes (CAMPBELL et al., 2010).

It is noticeable that during the MRI period, the Quality of Life (QoL) of the professional is affected. Experts from various parts of the world were gathered by the World Health Organization and defined that the term "Quality of Life" refers to an individual's perception of their place in life, in the context of their culture and value system, and their perceptions related to their goals, expectations, standards and concerns (THE WHOQOL GROUP, 1995). Despite defining what QoL is, the WHO does not determine the minimum quality value, and these analyzes are carried out by comparing the scores of each group and their influencing factors.

According to the legislation regarding MRI (DANTAS, 2019), the resident doctor is entitled to adequate conditions of rest and personal hygiene during his shifts. Your workday must be 60 hours a week, including a 24-hour shift. However, medical residents often work well beyond this limit, leading to excessive stress, exhaustion, limited learning opportunities, general decline in QoL and possible development of some disease (SPONHOLZ et al., 2016).

One factor that can be used as a QoL score parameter during MRI is daytime sleep deprivation. Sleep is considered as necessary to the maintenance of existence as the act of eating. Its biological function is fundamental in memory consolidation, normalization of endocrine functions, thermoregulation, conservation and restoration of energy and

restoration of brain energy metabolism. Therefore, sleep disturbances can lead to significant changes in the physical, occupational, cognitive and social functioning of the individual, in addition to substantially compromising QoL (RAMOS; RODRIGUES, 2017).

Research shows that residents have, on average, six hours of sleep per night, which is lower than the average of the adult population in general, which has seven to nine hours/night (PURIM et al., 2016).

This overload of activities, associated with excessive fatigue at work, a sense of urgency, deciding priorities and scarce resources, generates stress for professionals, which is directly linked to care errors, resulting in patient safety, as indicated by several authors (BRUM et al, 2015; WEN et al., 2016).

In the group of residents, it is possible to observe a reduction in QoL indices and an increase in scores on depression and anxiety scales when compared to other doctors and medical students. Studies in young doctors on the effects of sleep deprivation as a result of night work were able to show, through psychomotor tests, greater latency in response to very simple stimuli, indicating that there were more errors and a worse rate of accuracy at work (PURIM et al., 2016).

Psychiatrist H. Freudenberger, in the 1970s, described the Burnout Syndrome (BS), or professional exhaustion, not exactly with that nomenclature, but as a psychiatric illness experienced by some professionals who worked in institutions whose object of work were people (PÉREZ; PIANA; GONZALEZ, 2010).

BS progress was expressed in 4 grades:

1st Degree - Lack of enthusiasm, pleasure or desire to go to work. Spine, back and neck pain.

2nd Degree - The relationship with other people is no longer the same. Absenteeism,

changing jobs and the feeling of being persecuted by others are on the rise.

3rd Degree – The occupational capacity drops, appearing psychosomatic illnesses, such as allergies, high blood pressure peaks and others. The increase in alcohol use increases in this phase.

4th Degree – This phase is characterized by attempts or thoughts of suicide, alcoholism, drug addiction; more serious diseases may appear, such as cancer, cardiovascular accidents and others. Before this stage, or before it, the best thing to do is to distance yourself from work (BRASIL, 2001).

BS is considered a public health problem, as its incidence has increased significantly in recent years in several countries, including Brazil. It manifests itself with implications for the worker's mental and physical health, impairing QoL in the professional environment (SILVA, DIAS; TEIXEIRA, 2012).

Linked to Burnout and long working hours, an increase in medical errors has been observed among residents affected by Burnout and/or who work long hours (DIAS, 2016).

MRI is an important milestone in the life of a newly graduated doctor. With increasing competition for access to MR programs, passing is a major achievement in personal and professional development. However, when starting the specialization, the doctor, now a resident doctor, is faced with a different reality from graduation, characterized by increased levels of stress, long working hours, sleep deprivation, worsening of social and leisure life, in addition to the change of the degree of responsibility before their preceptors and especially their patients. During this process, there is a significant change in QoL.

Ribeiro et al. consider that MRI is the most difficult and exhausting part, physically and emotionally, of the training of a specialist doctor. The medical specialization model,

RM, despite still being considered the gold standard, presents risk factors for the development of changes in the mental health of the medical professional, given the psychological pressure to apply knowledge, often deficient, acquired in graduation. The lack of trained preceptors to tutor the resident doctors, the long working hours, the night shifts, the feelings of insecurity and incapacity make the MRI routine exhausting.

The main objective of the study was to analyze the presence of BS, QL and Daytime Sleepiness in Anesthesiology, Internal Medicine, General Surgery, Orthopedics, Otorhinolaryngologist, Gynecology and Obstetrics residents at Fundação Hospital Adriano Jorge (FHAJ), located in the city of Manaus – Amazonas, and in the UEA.

The researched resident doctors belong to the generation classified as generation Y, so called those born between 1982 and 2000, also known as “millennials”. André et.al, show us the first authors to describe the term “millennials” for the first time in 1992, in the book *Generation: the history of America's future*. Millennials do not see their career exclusively as a source of income, they seek jobs connected with their values, beliefs and lifestyle, understanding that it is not just a job and remuneration, but also QoL and a way to contribute to the evolution of society to which they belong. Perhaps this explains the great participation of resident doctors in this research, showing that in addition to being medical specialists, they are engaged in this very contemporary topic and in contributing to the construction of a healthier society.

Loya-Murguía et al., in a study presented in 2018, reported that in Latin America, the prevalence of BS in health professionals varies between 2% and 76%.

The self-assessment of the residents in this study is similar to the affirmation of the research by Fabichack, Silva and Morrone

(2014), who mention that in Brazil, the presence of this syndrome was 78.4% among medical residents of Orthopedics, Internal Medicine, Surgery, Pediatrics, Gynecology and Obstetrics, in a public hospital.

However, Lima et al., in their study, showed the existence of BS in 20.8% of the 120 resident doctors studied at ``Universidade Federal de Uberlândia`` (UFU), in line with our study and most of the literature on the subject.

It is also interesting to note that in this same research, the emotional exhaustion dimension was the most frequent manifestation, with 65.00%, very similar to what was found in our study, which was 67.74%.

Referring to the BS, the presented results indicate that the “Emotional Exhaustion” dimension is largely responsible for the development of the syndrome, followed by depersonalization, thus confirming previous information, which indicated that several experiences and elements present in the residency process have generated great stress and, consequently, exhaustion, thus triggering BS.

Leandro et al. (2020) state that the presence of professional burnout in its broadest sense is defining for the development of the syndrome, a consequence of situational, personal and professional stressors. Hoelz and Campelo (2015) report that BS, then understood as a response to chronic work stress, is a consequence of the numerous conflicts mentioned that are experienced during this period of student-doctor transition, characteristic of the residency, and its main factors related to the physical exhaustion and emotional exhaustion.

Regarding the year of residence, the last years were the ones that presented the highest scores for “exhaustion” and “depersonalization”. Moreira et al. (2016) explain this fact, considering that BS is a gradual process and that if the stressors are

not removed, the risk of acquiring it becomes greater.

Some authors disagree with the result found in this research. For Borges et al. (2020), residents who are in the early years of their specialist training are more likely to develop BS. Likewise, it was shown in the research by Marinos et al. (2012), in Lima, Peru, that first and second year residents presented reports compatible with the syndrome.

The self-assessment of QoL, through the WHOQOL questionnaire – abbreviated, consists of the score (on a scale of 0 to 10) assigned by the resident, according to their perception of QoL inside and outside medical residency. We had, second result, an average of 5.42 ± 0.53 .

The study demonstrated a low QoL of the interviewees, corroborating the literature. Asaiag et al. (2010) reported that the RM period can indeed affect QoL, and associate this fact with the relationship between RM and a high workload, insufficient leisure time, dissatisfaction with the residence, which may be due to the general training conditions, and lack of pedagogical structure. Moreira et al. (2016) attribute this compromised QoL, in part, to the long workday, greater professional responsibility and greater expectations regarding the professional future. Torres et al. (2011) state that unsatisfactory working conditions, such as lack of recognition, inadequate remuneration, lack of autonomy, instability, lack of infrastructure and security can overwhelm residents, generating stress and negatively affecting their social life and QoL.

Silva et al. (2011), in their study, concluded that the first year of residency is the one with the highest anxiety rate, justifying the fact that it is a phase of doubts and uncertainties regarding the chosen specialty, with insecurities to carry out medical practice, in addition to needing time to study and carry out research. In the

following years, these pressures became less evident.

Santana et al. (2014) demonstrated that not only in Brazil, but also in the United States, the period of the first year of residency is the most emotionally exhausting, attributing this fact to the accumulation of emotional exhaustion in the residency, which generates an erosion of medical idealism over the course of the residency period. time. Abreu Reis et al. (2019) also concluded in their research that the QoL of first-year residents is worse than the others.

Macedo et al. (2009) observed that QoL in medical residents improves from the second year on. In this study, they also detected some predictors of better QoL, among them, they mentioned the fact of being in the second or third year.

Moreira et al. (2016) report that the RM is a period marked by long work and study days and little time for rest, since the program is developed in an exclusive dedication regime, with a workload of 60 hours per week, which can interfere negatively on sleep quality.

Mordant et al. (2014) state that fatigue, drowsiness, depression, exhaustion, job dissatisfaction and low QoL can negatively affect professional performance, quality of care and patient safety and satisfaction.

Lourencao et al. (2010) cite several studies, pointing out that most residents are drowsy and have difficulty sleeping, regularly using alcoholic beverages or medication to help induce sleep.

Macedo et al. (2009) describe that sleep deprivation is one of the main psychological reactions in residency programs and is among the most important stress factors.

It is a fact that MRI is fundamental for completing the specialization course, since, as already mentioned, it is considered the gold standard of teaching. professional as the patient; therefore, offering adequate support

to residents, mainly psychological and/or psychiatric, is important for us to maintain the standard of excellence and improve the FHAJ and UEA medical residency programs.

This way, the urgency of support for the resident doctor and preceptor is notorious, whether psychological, psychiatric or pedagogical, mainly with support and reception. In this context, the Support Center for Resident Doctors and Preceptors (NAMP) was born. A core of support and permanent research for the resident doctor and preceptor, with the main objective of preventing BS, to monitor the residents' QoL indices, in addition to pedagogical support and constant training for preceptors.

Student support centers are already a reality in most medical schools. Medical student support centers are an important part of student care and medical training (RONCAGLIA; MARTINS; BATISTA, 2020), and so we bring this idea to resident doctors who are recent graduates and are in the student-professional transition.

The academic community is already aware that monitoring and psychological and/or psychiatric support is not enough, requiring a support network at all levels (BELLODI, 2007), in addition to a constant review and discussion in the curriculum and, mainly, a reflection on medical culture (TEMPSKI; MARTINS, 2012). Bringing it to the postgraduate level, the discussion of skills and competences that the specialist doctor needs to have at the end of each training stage is part of the reflection and engagement of all preceptors involved in teaching young doctors, even if they are assistants, further justifying the core, also focusing on the preceptor.

In addition, changing the culture and medical structure, especially in MRI, is a constant deconstruction work. Moral harassment, the scope of the culture of harassment that cause possible deleterious

effects on academic life and the health of the resident are other concerns, as the harassed are more likely to develop psychiatric disorders (MARQUES; MARTINS; PAULA; SANTOS; 2012).

Thus, we propose the NAMP, which will be described as the product of this dissertation, which shows the urgent need for a paradigm shift in MR programs in order to train more qualified and healthier specialist doctors for Brazilian society.

CONCLUSION

In the present study, we identified that most medical residents at FHAJ and UEA have BS, with emotional exhaustion being its most prevalent dimension, followed by depersonalization and lack of personal fulfillment.

Daytime sleepiness was detected with a pathological index, with the second year of MRI having the highest incidence of this pathology.

The study showed that MRI was related to a phase of their lives with low QoL, with the percentage found between the specialty and the year of residency being insignificant, leading us to conclude that this low QoL is present throughout this period.

What we can observe is that BS is measured by “emotional exhaustion”, one of the causes of daytime sleepiness, and contributes to poor QoL. And the latter can trigger a lack of “personal fulfillment”, which also generates a percentage to measure BS, forming a cycle of factors that are interconnected and give rise to numerous changes in the mental health of resident doctors.

BS, low QoL and pathological daytime sleepiness have a multifactorial etiology, involving individual, social and organizational situations. They can be detected early or even prevented, as long as the institutions are moved, seeking to take care of the occupational health

and the psychic, physical and social balance of the members of the organization's team. The development of programs and training are essential for institutions to pay more attention and invest more in this issue.

Improvements in the training and work environment may be feasible. Changing culture and deconstructing paradigms regarding MRI must be considered and implemented, with intervention projects that seek to improve the experience of the resident doctor in this very important stage of professional life. Always with the primary objective of forming better and more complete medical specialists for Brazilian society and, mainly, for the SUS (Unified Health System).

The reduced sampling of this research, somewhat limiting our work, and the low number of studies on this subject, national and international, despite its social, political and economic relevance, show the need to improve more research related to and directed to this public- target.

Furthermore, we did not carry out an approach that studies subjective aspects of social phenomena and human behavior. Although the object of the study was phenomena that occur in a given time, place and culture, this qualitative approach was not part of the study objectives, leaving a gap for future qualitative research with resident doctors and preceptors. Thus, research involving interviews (with material specially constructed for this purpose) and field observation with resident doctors and preceptors from different medical residency programs is necessary so that we can have an empirical and experimental discourse analysis. We would also have a content analysis when the text is the expression of the subject, seeking to categorize the units (words or phrases) that are repeated, allowing the inference of knowledge related to the conditions of production/reception.

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