Quality of life of surgeons who work in the public health system

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Abstract: According to the World Health Organization, quality of life (QoL) is defined as "the individual's perception of their position in life within the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns". In light of the fast-paced lifestyle imposed by capitalism, it is imperative to question the quality of life that workers experience during their exhaustive and demanding work hours. Consequently, assessing QoL at Work is regarded as a challenging process, encompassing personal criteria such as happiness, love, well-being, personal fulfilment, and individual pleasure, among others. When considering professionals in the medical field, there is a notable decline in the threshold of quality of life, a characteristic that is further pronounced in the case of surgeon physicians, particularly those employed in public hospitals. These individuals often operate at the brink of exhaustion, exhibiting symptoms such as disrupted sleep, alterations in psychological structure, self-esteem issues, and professional performance deterioration, which are indicative of burnout. With this understanding, the present research aims to review the published literature that addresses the quality of life at work and the professional practice of surgeon physicians within public networks, seeking to objectively comprehend the direct relationship between these two factors.

Keywords. Quality of life at work, Doctors, Surgeon physicians,Public hospitals

1. Introduction

Quality of life (QoL) is a complex topic that needs to be increasingly addressed in the fast-paced and stressful modern context. Accordingly, the World Health Organization (WHO) defines it as the "individual's perception of their position in life in the context of the culture and value system in which they live and in relation to their goals, expectations, standards, and concerns" (1).

Since capitalism became globally and hegemonically established, work activities have taken on a significant role in people's lives, serving as the primary vehicle for satisfying the increasing desires and individuals needs(2). As people started to spend more hours daily at work, it is natural to question the importance and impact that quality of work life (QWL) has on mental health and individual performance.

In this context, QWL emerges as a necessity to reduce organizational distress and promote health by improving working conditions (2,3), which are often exhausting, intense, and demanding. Under such circumstances, when considering medical professionals, there is a noticeable decline in their quality of life, especially among surgeons, particularly those working in Brazilian public hospitals. These professionals live on the brink of exhaustion, showing signs such as sleep disturbances, psychological structure alterations, and impairments in self-esteem and professional performance (4).

Due to this evident overload, the number of professionals suffering from burnout syndrome is steadily increasing. Burnout is characterized by a loss of empathy, emotional fatigue, and a diminished sense of personal competence and achievement (5). The consequences of this syndrome are evident both personally and professionally, and can result in tragic and severe outcomes, not only for the physician but also for their patients (6).

Given the above, and considering that working conditions in the public health system are even more precarious and exhausting due to insufficient state investment, and the limited knowledge production in this area, this study was motivated.

2. Methods

This article is a literature review conducted between July and September 2024. For this purpose, a self-funded computer with internet access was required. A bibliographic search was carried out using the PubMed and Google Scholar platforms, including articles published in journals, in both Portuguese and English, that addressed the themes of quality of work life, the quality of life of doctors, the quality of life of surgeons, work in public hospitals in Brazil, and the abbreviated version of the validated questionnaire to assess quality of work life, the QWLQ-BREF, with no study design being excluded. The exclusion criteria included articles with more than 10 pages and those published before 2010. Additionally, some references from these articles were analyzed to deepen the discussion. In total, 10 articles were fully analyzed. Other data platforms were not explored due to time constraints and the number of authors involved. Since this is a literature review, it was not necessary to submit this work to the medical research ethics committee.

3. Results

3.1 History of work and quality of life

It is known that with the Industrial Revolution, labor became primarily independent of human effort and was transformed into an extremely "mechanized and objectified" process (3). With the onset of World War II, significant technological and scientific advancements emerged, including new work methods and tools, which presented both opportunities and challenges.

In this context, people, now seen as "human capital," began to be more "valued," and working conditions evolved from inhumane standards to an idealized stage in which the balance between work and personal life was sought. It was in this scenario that the coherent perception of the relationship between the quality of work and quality of life (QoL) began to emerge (3). However, the contradiction between the need for increasing productivity in a shorter time frame and the pursuit of better quality of life, along with improved work performance, continues to exist in modern society.

Thus, work has come to play an increasingly central role in an individual's daily life, whether as a means of subsistence, a social group, or even personal fulfillment (7). As a result, it constitutes an important factor and must be recognized and valued as a decisive element in people's quality of life (QoL).

In this context, it is notable that the history of labor is a narrative of continuous struggle and progress. From the earliest societies to the present day, the pursuit of better working conditions and quality of life has been a key driver of social change. Through organization, solidarity, and persistence, workers have increasingly sought to secure rights and improve their living conditions, although new challenges continue to arise (3).

The World Health Organization (WHO) defines quality of life (QoL) as the "individual's perception of their position in life, in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns" (3). From this, it can be inferred that work holds a significant place in people's lives in modern times and is directly linked to their quality of life.

Quality of Work Life (QWL) initiatives have two primary goals: one is to improve the quality of life and satisfaction in the workplace and the other is to increase productivity and performance. While many believe that these two objectives are interconnected, where improvements in working conditions would directly lead to increased productivity, the relationship between worker satisfaction and productivity is not necessarily parallel. However, this does not mean that these goals are incompatible or entirely independent of each other (3,4,8).

According to Silva (2000), work is a vehicle for personal and professional growth, transformation, and independence, yet it has been generating issues such as dissatisfaction, disinterest, apathy, and irritation, leading to occupational diseases stemming from the conditions inherent to types of work that offer a declining quality of life (7).

It is important to emphasize that, in certain situations, improvements in working conditions can indeed contribute to increased productivity, although this is not a rule. Therefore, QWL aims to combine and analyze the quality of life at work, understanding that even though its objectives may be considered separately, when combined, there is a natural tendency to produce satisfactory changes for both the organization and its workers (8,9).

3.2 The career of the surgeon

Despite Brazil having approximately 50% of its doctors as general practitioners, the number of surgeons in large hospitals remains significant, as they are the only ones deemed qualified to perform a range of invasive procedures.

To become a surgeon-physician, a professional must first undergo 6 years of medical school, which entails exhausting study schedules, sleep deprivation, and consequently poor quality of life (QOL). After obtaining the title of "physician," the professional must complete a medical residency program, defined as "a postgraduate education modality for physicians, in the form of a specialization course, characterized by in-service training, conducted in health services, whether university-based or not, under the guidance of

highly qualified ethical and professional medical practitioners," which has a minimum duration of 3 years, in brazil. This program qualifies these physicians to diagnose and treat basic surgical diseases across all specialties of life (4).

Surgeons generally tend to be quicker and more impulsive, more rational, aggressive, and interested in interpersonal contact, although to a lesser extent than their clinical counterparts (4). This tendency is also due to the fact that they are more exposed to extreme stress, leading to physical and mental exhaustion, which certainly contributes to impaired technical performance, medical errors (6), and unnecessary costly prescriptions.

A German study found that 74% of surgeons work more than 60 hours a week, and 74% reported restrictions on their private and family life due to work overload (10). Additionally, they face precarious working conditions, exhausting hours, multiple responsibilities, professional burnout, and reduced salaries, factors that contribute to a lower quality of life for these professionals (4).

The long hours of work negatively impact personal lifestyle and are one of the primary reasons cited for abandoning a surgical career. Historically, surgical training has not focused on the concept of modifying residency programs to improve the quality of life of its participants (6).

These long work hours can be likened to daily marathons, where physical and mental fatigue accumulates, affecting not only health but also personal satisfaction and the balance between professional and personal life. Traditionally, the focus of surgical training has been on technical competence and rigorous preparation, often at the expense of residents' well-being. The idea of adjusting residency programs to enhance the quality of life for trainees, providing a healthier and more sustainable work environment, is an approach that has only recently begun to gain attention, leading countries like the United States to establish regulations to try to manage this work overload, though these are often not observed in practice (5).

Thus, it becomes evident that burnout is inevitable. This factor, which plays a significant role in the development of physical and mental health problems, also contributes to a significant increase in the risk of suicide and/or burnout (4,6), highlighting that these health professionals, along with the hospitals they work in, need to pay more attention to the quality of life of their employees, for their own well-being and because it is a central issue when treating patients.

Burnout can be defined as "a syndrome of emotional exhaustion, feelings of depersonalization, and a lack of personal accomplishment, specifically in relation to professional activities" (6). A study conducted in an American hospital revealed that 40% of surgeons experience burnout, 30% live with depressive symptoms, and only 28% consider themselves to be living with quality of life (QOL) (6). The syndrome affects both personal and professional relationships, and there is a systemic concern that the burnout experienced by physicians leads to increased rates of patient dropout and evasion. Moreover, it has been demonstrated that burnout is associated with lower satisfaction and worse outcomes in patient recovery (5).

In light of the numerous risks identified, to which surgeon-physicians are exposed daily due to low quality of work life (QWL), it is of utmost importance to assess the quality of life of these physicians, aiming to safeguard their health, retain these professionals, and indirectly foster more diligent, secure, coherent, humane, and committed professionals.

3.3 Quality of work life in public hospitals

Quality of Work Life (QWL), as previously mentioned, is a broad and evolving concept, but it converges in a point that the actions that an employer takes, in collaboration with their employees, to contribute to an improvement in the lives of workers and their work environment, impacts in a greater satisfaction and better results (9).

In the public sector, in addition to the aforementioned, there is society pressure for better utilization of resources and improved outcomes, accompanied by greater transparency in the use of financial resources. As a result, individuals are becoming less passive regarding omissions in public services and activities, which increases demands, bureaucracy, and stress (9).

Bureaucratic public organizations are common in a capitalist state. The bureaucratic state creates social roles, norms, disciplinary control, power, and hierarchies, aiming for greater growth and state development. In this scenario, employees tend to resist these bureaucratic norms, which impose a standard of behavior. This strict requirement for discipline among employees often conflicts with their individual needs, values, and beliefs (9).

To assess QWL in the public sector, it is imperative to understand that this sector requires greater dissemination of methods, indicators, and tools, generating effective management practices and values aligned with working conditions in the public sector. With this understanding, it becomes possible to explore a wider variety of factors that involve QWL in these environments, facilitating the achievement of more realistic and satisfactory outcomes (9).

When discussing work in the hospital sector, it is important to recognize that it is rich, stimulating, and heterogeneous. In this respect, it can encompass simultaneously unhealthy, burdensome, and challenging activities for all actors, particularly healthcare professionals, including doctors (7).

Moreover, these workers generally experience numerous difficulties in hospital environments, as these places struggle to meet the individual needs of

patients and their workers (7), especially public hospitals, which often have limited resources.

Some Brazilian hospitals are either abandoned or have dissatisfied healthcare team members due to working in arduous and unpleasant conditions. It is in this uncomfortable environment that medical teams carry out their continuous work, in alternating shifts, working overtime, suffering from disruption of their biological rhythms, and becoming physically and mentally exhausted... In short, they experience distressing conditions as a result of their activities, exposing themselves to various risks (7).

Thus, it is evident that, according to the constitution of the Ministry of Health, it is the state's duty to promote indispensable conditions for the full exercise of labor, ensuring through economic and social policies the reduction of the risks of diseases or other afflictions in the workplace and seeking to create conditions that guarantee access for everyone to actions and services for their promotion, protection, and recovery (7).

The Occupational Health Medical Control Program (PCMSO) aims to promote health through admission, periodic, and dismissal medical examinations, based on the risks to which the worker is exposed (7).

The author “Costa” further emphasizes that collective protection measures incur high costs and are often postponed. When considering the benefits highlighted by these protective measures, workers will certainly be safer and more satisfied in performing their activities, thus returning the high cost to the employer in the form of profit (7).

3.4 The assessment of quality os work life

According to Ferreira, the Quality of Working Life (QWL) encompasses several structural factors that serve as independent variables yet impact the overall conditions (10). These factors include working conditions, work organization, socio-professional relationships, recognition and professional growth, and the work-social life connection.

When addressing “work issues,” aspects related to working conditions, organizational support, and compensation are involved. Concerning the “organization of work,” the adequacy of time, task division, and management are assessed. Furthermore, the variable “socio-professional relationships” pertains to hierarchical interactions with peers and both internal and external stakeholders. Additionally, the factor “recognition and professional growth” extends beyond the assessment and acknowledgment of completed work to encompass commitment, dedication, and career planning. Lastly, the “work-social life connection” aims to represent perceptions regarding enjoyment and well-being at work, a sense of social utility, social life, and the relationship between work and leisure (10).

In his model, the author analyzes QWL at two levels: a macroergonomic level, which refers to the representation of workers based on the organizational context in which they are embedded, and a microergonomic level, which seeks to evaluate how workers manage the demands of their labor activities and their individual impacts.

In certain circumstances, improvements in working conditions can indeed contribute to increased productivity, although this is not always a rule. Thus, QWL endeavors to integrate and assess the quality of life at work, recognizing that, even when objectives are analyzed separately, if they are correlated, there exists a natural tendency to foster beneficial changes for both the organization and its workers.

To quantify and evaluate quality of life, which has been gaining increasing importance, various measurement tools have been created and made available to the scientific community. However, the primary validated instrument, the WHOQOL-100, comprising 100 questions, has presented some negative factors related to response logistics. The considerable time required to answer all 100 questions tends to result in incomplete responses, and as the survey progresses, answers often become less attentive. In both instances, this leads to a distortion of the results concerning the variable under study, indicating that this instrument required abbreviation (3).

Based on the aforementioned questionnaire, Reis Junior developed the QWLQ-78 (Quality of Working Life Questionnaire), which drew upon classical QWL models, such as those by Walton (1973), Westley (1979), Hackman and Oldham (1983), and Davis (1983), as well as the domains of the WHOQOL-100 instrument (3). In this case, since the instrument was designed to evaluate QWL, it was established that the domain related to work would encompass a greater number of questions compared to the others.

The assessment of internal consistency for the QWLQ-78 was conducted using Cronbach's alpha coefficient, a statistical indicator of the reliability of a psychometric tool. The score obtained was 0.92, indicating that it is a highly reliable instrument. Additionally, to secure its validation, a highly specialized expert in the QWL field (a researcher with a doctoral degree, associated with strict postgraduate programs, engaged in research lines related to quality of life and QWL) was selected, and criteria were established, leading to the conclusion that the instrument “is capable of reliably assessing the QWL of respondents, regarded as a ‘very good’ tool” (3).

To minimize errors arising from the length of the validated questionnaire, which contains 78 questions, methods similar to those employed in the development of the WHOQOL-bref were utilized.

Among the 78 questions, 20 were selected for the abbreviated version of the instrument (QWLQ-bref), consisting of four from the physical/health domain, three from the psychological domain, four from the personal domain, and nine from the professional domain (3).

4. Conclusão

The literature review presented, highlights the close relationship between work and quality of life throughout history, from the Industrial Revolution to the present day, emphasizing the advancements and challenges faced by workers in various fields.

The literature indicates that, although technological development and modernization have led to significant improvements in working conditions, a tension still exists between the increasing demand for productivity and the necessity to promote worker well-being.

The medical career, particularly the surgeon one, exemplifies how work overload can adversely affect quality of life, resulting in issues such as burnout and occupational diseases. In the public hospital sector, these difficulties are even more pronounced, given the scarcity of resources and adverse working conditions.

Quality of Working Life (QWL) emerges as an essential approach to balance organizational needs and the well-being of professionals, with instruments such as the QWLQ-brief proving useful in assessing these conditions.

Thus, the pursuit of improvements in working conditions, aligned with a higher quality of life, remains a central challenge and a continuous objective for society and organizations. There is a pressing need for a more unified evaluation of these variables, considering the scarcity of studies that combine the relevant aspects.

5. References

1. Santos Santana Alexandre Gomes Feitosa Lorena Barreto Arruda Guedes Noely Bastos Brito Sales V. QUALIDADE DE VIDA DOS PROFISSIONAIS DE SAÚDE EM AMBIENTE HOSPITALAR.

2. Camargo SF, Almino RHSC, Diógenes MP, Neto JP de O, da Silva IDS, de Medeiros LC, et al. Quality of working life from the perspective of different groups of professionals working in a maternity hospital. Ciencia e Saude Coletiva. 2021 Apr 1;26(4):1467–76.

3. Cheremeta M, Pedroso B, Pilatti LA, Kovaleski JL. Construção da versão abreviada do QWLQ-78: um instrumento de avaliação da qualidade de vida no trabalho. Revista Brasileira de Qualidade de Vida. 2011 Jul 1;3(1).

4. Sanchez HM, Sbroggio Junior AL, De Morais EG, Agostinho PL da S, Poloniato TB, Soares PG. Avaliação da qualidade de vida de médicos clínicos e cirurgiões. Revista Brasileira em Promoção da Saúde. 2018 Oct 31;31(3).

5. Galaiya R, Kinross J, Arulampalam T. Factors associated with burnout syndrome in surgeons: A systematic review. Vol. 102, Annals of the Royal College of Surgeons of England. Royal College of Surgeons of England; 2020. p. 401–7.

6. Pulcrano M, Evans SRT, Sosin M. Quality of life and burnout rates across surgical specialties: A systematic review. Vol. 151, JAMA Surgery. American Medical Association; 2016. p. 970–8.

7. Anhanguera U, De B, Marcitelli A, Regina C, De Q, No V, et al. Ensaios e Ciência: Ciências Biológicas, Agrárias e da Saúde. 2011;15(4):215–28. Available from: http://www.redalyc.org/articulo.oa?id=26022135015

8. De Souza Aquino A, Cristina A, Fernandes P. Qualidade de vida no trabalho Quality of work life. Vol. 31, J Health Sci Inst. 2013.

9. Klein LL, Pereira BAD, Lemos RB. Quality of working life: Parameters and evaluation in the public service. Revista de Administracao Mackenzie. 2019;20(3).

10. Carga de trabalho e qualidade de vida dos cirurgiões. Resultados e implicações de uma pesquisa em grande escala realizada pela Sociedade Alemã de Cirurgia.