



Work saturation and its influence on the management of optimal working conditions in healthcare institutions. Proposals

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Abstract: Job saturation in healthcare institutions is a critical problem because it affects workers' well-being. This study evaluates how mental saturation and work organization influence performance. A questionnaire was applied to 40 workers from different health institutions in Peru, finding the highest percentage for the intermediate level with 80% of mental saturation, 70%: physical work saturation and organizational conditions; being in a stressful work environment. It is urgent to implement strategies to reduce work saturation, such as teleconsultation policies and alliances with public institutions to promote subsidized health programs. In addition, it is suggested to use the facilities of other public institutions during available hours to improve organizational conditions. The lack of action could have serious consequences for the health of the personnel, holding the managers of the respective institutions responsible for the deterioration and irreversible damage to the workers.

Key words: Labor saturation, manage, labor conditions, Proposals

Saturación laboral y su influencia en la gestión de condiciones laborales óptimas en instituciones de salud. Propuestas

Resumen: La saturación laboral en las Instituciones de Salud es un problema crítico por afectar al bienestar de las(os) trabajadores. Este estudio evalúa cómo la saturación mental y la organización del trabajo influyen en el desempeño. Se aplicó un cuestionario a 40 trabajadores(as) de diversas instituciones de salud del Perú, encontrando el máximo porcentaje para el nivel intermedio con 80% de saturación mental, 70% : Saturación laboral física y Condiciones organizacionales; estando en ambiente laboral estresante. Urge implementar estrategias para disminuir la saturación laboral, como políticas de teleconsulta y alianzas con instituciones públicas para promover programas sanitarios sostenidos. Además, se sugiere utilizar las instalaciones de otras instituciones públicas en horario disponible para mejorar las condiciones organizativas. La falta de acción podría tener graves consecuencias para la salud del personal, responsabilizando a los gestores de las Instituciones respectivas por el deterioro y daño irreversible de los trabajadores.

Palabras clave: Saturación laboral, gestionar, condiciones laborales, Propuestas

Saturação de mão de obra e sua influência na gestão de condições ideais de trabalho em instituições de saúde. Propostas

Resumo: Resumo: A saturação do trabalho em instituições de saúde é um problema crítico porque afeta o bem-estar dos trabalhadores. Este estudo avalia como a saturação mental e a organização do trabalho influenciam o desempenho. Um questionário foi aplicado a 40 trabalhadores de diferentes instituições de saúde no Peru, encontrando a maior porcentagem para o nível intermediário com 80% de saturação mental, 70%: saturação física do trabalho e condições organizacionais; estar em um ambiente de trabalho estressante. É urgente implementar estratégias para reduzir a saturação no trabalho, como políticas de teleconsulta e alianças com instituições públicas para promover programas de saúde subsidiados. Além disso, sugere-se usar as instalações de outras instituições públicas durante o horário disponível para melhorar as condições organizacionais. A falta de ação pode ter consequências graves para a saúde da equipe, responsabilizando os gerentes das respectivas instituições pela deterioração e pelos danos irreversíveis aos trabalhadores.

Palavras-chave: Saturação de mão de obra, gerenciar, condições de trabalho, Propostas



I. Introduction

Work overload has become a critical situation in some health institutions, specifically; that is, complicating occupational activity, especially in sectors such as health, where emotional and physical demands are high. This study focuses on the impact of mental overload and work organization on workers in a health center, highlighting how these variables influence their performance and well-being; thus, Johnson and Lee (2022) highlight that implementing effective strategies can mitigate work stress and improve staff well-being, highlighting the importance of organizational interventions.

Hafsa and Suril (2021) consider that recent advances in Artificial Intelligence (AI) and Machine Learning (ML) have improved the prediction of health emergencies and immune responses. Despite skepticism about their application in healthcare, their use is increasing. Supervised, unsupervised, and reinforcement learning approaches are explored, as well as the related ethical and privacy challenges.

The challenges inherent to job oversaturation in the health field include long working hours, scarcity of resources, and constant pressure to meet quality expectations in patient care. These factors can lead to a state of professional burnout, according to a similar argument belonging to Barreto & Barreto. (2022) which refer to the Overwork and Living Conditions of the Health Personnel of a Hospital, indicating that it not only affects the health of workers, but also impacts the functioning of the health system as a whole. Lack of personal satisfaction can lead to a decrease in productivity and an increase in staff turnover, which further aggravates the situation in public hospitals.

Furthermore, Garg et al. (2019) address how work overload affects healthcare workers' ability to adequately manage working conditions. The perception of overload can compromise the quality of care, highlighting the importance of strategies that reduce workload and improve employee well-being.

Importance of addressing job saturation and its consequences

Understanding the relationship between job saturation and personal satisfaction is crucial to implementing effective occupational health policies; although one of the alternatives may be carried out by considering recreational activities, such as in the work performance of teachers at a health institution Chávez et al. (2022).

Improving the quality of working life of healthcare professionals not only benefits workers, but also has a direct impact on the quality of service provided to patients. According to studies such as those by Contreras et al. (2022), the quality of life and well-being of workers are determining factors for quality care, which underlines the importance of addressing this issue from a comprehensive perspective.

II. Methodology

A quantitative approach was used, using structured surveys that measured the perception of mental overload and the quality of work organization among female workers. The data were analyzed using descriptive statistics to establish job saturation percentages.

The scope of the research was descriptive on information from 12 multiple choice items, measured with the Likert scale, were adapted from Cabezas (2000) whose description of percentages is made on each of the adapted dimensions:



Dimension 1: Physical job saturation

Dimension 2: Mental saturation

Dimension 3: Shift Work

Dimension 4: Organizational conditions

The items were previously validated by the judgment of four experts in health labor management, with expertise in research methodology, each expert had a percentage score; the average was 97.5% validity. Considering a time of 18 minutes for each respondent to be answered; for the selection of the respondents a non-probabilistic sample of 40 workers from a health center in Peru was considered.

Reliability was previously determined through a pilot study of 4 workers; the reliability value was determined to be 0.89; being reliable for being greater than 0.60.

At the end of the research, it is proposed to implement proposals to reduce work saturation, through care policies and alliances with various public institutions, for the benefit of health personnel, which may impact the well-being of users.

III. Results

Table 1.

Descriptives of job saturation and its dimensions.

| | | Counting | Percentage (%) |
|-------------------------------|------------|----------|----------------|
| D1: Physical work saturation | Low | 2 | 5.0% |
| | Intermedia | 28 | 70.0% |
| | High | 10 | 25.0% |
| D2: Mental saturation | Low | 4 | 10.0% |
| | Intermedia | 32 | 80.0% |
| | High | 4 | 10.0% |
| D3: Shift Work | Low | 8 | 20.0% |
| | Intermedia | 24 | 60.0% |
| | High | 8 | 20.0% |
| D4: Organizational conditions | Low | 2 | 5.0% |
| | Intermedia | 28 | 70.0% |
| | High | 10 | 25.0% |



In *Table 1* it was perceived that the highest percentage of all the values in said Table corresponds to Dimension 2: Mental saturation, for the Intermediate level with 80% of the 40 respondents.

In the Dimensions (D1 and D4): Physical job saturation and Organizational conditions, the highest percentage in each of the dimensions was the same level (Intermediate) with 70% of the 40 respondents.

In Dimension 3 (Shift work) the maximum level was the same (Intermediate), although a lower percentage was observed with respect to the previous ones, representing 60%.

The results show that the highest percentage is 80% corresponding to the workers who experience Mental Saturation, with the same number of workers 10% for the Low level and 10% for the High level of mental saturation.

IV. Discussion

High levels of job saturation indicate that female workers are exposed to an environment that does not favor their professional or personal development, similar to another research with a similar argument belonging to Barreto & Barreto. (2022) which refers to the Overwork and Living Conditions of Health Personnel in a hospital during the period 2022-1

The lack of adequate resources to manage these conditions can lead to a vicious cycle of stress and poor performance, affecting both mental health and the quality of patient care. In relation to this research, emotional balance is considered relevant to reduce job saturation indicated by Garay et al. (2021) and resolution strategies can be increased in the staff of health institutions; it is necessary to promote management by results, similar to that carried out by local governments Garay et al. (2022).

In contrast, these situations also occur in other public institutions such as health institutions; in which the physical activities and responsibility of workers may improve their management capacity, as mentioned by Barreto and Sánchez (2021); likewise, some of the workers tend to be aware of their data online, which is why they frequently visit their metadata in different digital systems; thus, the research by Caján et al. (2021) highlights the importance of Metadata in pension systems; in the present research, it may be used to register workers and patients for eventual virtual care, avoiding saturating the consultation spaces.

To mitigate job saturation, various alternatives can be considered:

4.1. Promotion of Physical Activity: Promoting regular physical activity among healthcare personnel can help reduce stress and improve overall well-being. Physical activity is associated with a better quality of life, suggesting that integrating exercise programs in the workplace could be beneficial.



4.2. Psychological Wellbeing Programs: Implementing mental health programs that offer psychological support and stress management strategies can be critical to helping workers cope with work overload.

4.3. Work Flexibility: Providing flexible scheduling options and fostering a work environment that supports work-life balance can reduce the negative impact of work overload. Implementing policies that allow for better time management can be an effective strategy to improve staff satisfaction.

Contributions

The analysis of job saturation and personal satisfaction offers a series of significant contributions to public health practice:

- Awareness and Training: Raising awareness about the effects of work overload and the importance of personal well-being can be a crucial first step in fostering a cultural change in hospital environments; which is why, according to Caján (2022), it is essential to manage the working conditions and motivation of some members of health institutions.

- Ongoing Research: The need for ongoing research on this topic is essential. The studies mentioned, such as those by Contreras et al. and Faúndez-Casanova et al., offer valuable insights that can guide future research and policies in this area.

- Evidence-Based Interventions: Implementing evidence-based strategies that integrate physical activity, mental health, and work flexibility can transform work culture in hospitals, improving both employee satisfaction and patient care.

Addressing work overload in the hospital context is therefore essential to ensure the health and well-being of healthcare professionals, as well as to ensure quality care for patients. The implementation of comprehensive policies that consider the above-mentioned factors can significantly contribute to improving the current situation and fostering a healthier and more satisfactory work environment; in such a way that there is a favorable organizational climate which impacts on user satisfaction when receiving care Espinoza & Juárez-Gutierrez (2022)

The relationship between job saturation and personal satisfaction is a topic of growing interest in the field of public health, especially in hospital settings where demands can be intense. In this context, the study by Contreras et al. (2022) addresses the influence of factors such as the level of physical activity and eating habits on the quality of life of university students, which can offer a valuable perspective to understand the challenges faced by health professionals in public hospitals.

Finally, the analysis of these factors not only contributes to improving job satisfaction, but also promotes a healthier work environment, which is essential for the quality of care provided to patients in public hospitals.

Contreras et al. (2022): This study analyzes how nutritional status and physical activity level impact the quality of life of university students, suggesting that an active life can mitigate the negative effects of workload. This finding is relevant when compared to workload in hospitals, where stress and inactivity can aggravate job dissatisfaction.



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The integration of these studies provides a solid foundation for understanding the challenges faced by healthcare professionals and highlights the need for comprehensive strategies that promote both physical and mental health in demanding work environments.

Furthermore, Ahn & Kim (2021) reviewed and contributed to the literature on motor development being necessary to mitigate job saturation and Wang & Hodge (2020) conducted a systematic review on transformational leadership in the sports field, addressing its effects on performance and motivation, impacting the workplace.

De la Rosa, et al (2018) in their work "Normative criteria for professional quality of life" reveals that those responsible for the care of users, whether the institution's staff or family members, are exposed to many changes, one of them being physical and mental exhaustion and exposure to multiple diseases inherent to the environment, affecting their quality of life, showing a high percentage of stress in 80%, using as strategies the application of relaxation techniques and coping with work stress.

Harten & Leach (2020) examine how psychomotor skills influence the comprehensive development of children, highlighting their relevance in the context of children's rights; in addition, Sullivan & Kearney (2021) investigate the influence of leadership on sports performance and the importance of effective communication in organizational settings.

Analysis of Work Saturation in Health Personnel and Intervention Proposals

Work overload in health personnel is a growing concern, especially when saturation percentages exceed 70% in all dimensions evaluated. This critical situation requires urgent attention from health managers. Work overload not only negatively impacts the quality of service, but also increases the risk of stress-related illnesses, burnout and other mental health problems among staff and workers, which can previously be communicated online according to Rodríguez-Díaz et al (2018)

In this context, it is suggested that health managers adopt proactive measures to mitigate these adverse effects. For example, prioritizing the treatment of patients who require face-to-face care can help reduce workload. Cases that do not require immediate intervention could be treated through teleconsultations, which would allow for better management of time and resources. Vidal-Ledo et al. (2018) said strategy not only optimizes the use of resources, but can also improve staff satisfaction by reducing saturation in their daily tasks.

Additionally, the establishment of mobile or outpatient pilot health centres could be considered. These centres, which could be operated in collaboration with universities and higher health education institutions, would allow student trainees to provide basic care, alleviating the burden on already overstretched staff. However, it is crucial that these programmes are implemented with adequate oversight to ensure quality of care.

V. Conclusions



In conclusion, it is imperative that concrete measures be taken to address workload among healthcare personnel. The recommendations presented here not only seek to alleviate the burden on staff, but also to promote a healthier and more sustainable work environment.

VI. Proposals

It is proposed to carry out longitudinal studies to evaluate the impact of specific interventions in reducing mental overload (which, being at an intermediate level, is already a problem, because health personnel must be in ideal conditions, that is, they must be in low conditions of work saturation).

In addition, managers of health institutions (with similar problems) can manage alliances with various institutions to overcome space limitations and improve work organization; establishing institutional policies and agreements that prioritize the use of spaces and infrastructure of other public institutions, for the well-being of workers (impacting care for the population) as essential strategies for optimal functioning in the health center.

Another proposal that health managers can consider to overcome this problem is to propose alliances, requesting that health care programs (such as food culture, mental health) be inserted in educational institutions, including that the infrastructures of other public institutions be available during available hours to attend patients in person or through tele-consultations using resources and technological equipment from other public institutions to attend patients during hours when these environments are available. Otherwise, the negligence of not acting in the face of this emergency in the health sector will make them responsible for the consequences that the staff may suffer, including stress and exhaustion.

References

- Ahn, H., & Kim, J. (2021). Motor development in early childhood: A review of the literature. *Child Development Perspectives*, 15(1), 23-29. <https://doi.org/10.1111/cdep.12380>
- Barreto Espinoza LA, Sánchez Sánchez M. (2021). Responsibility and management of the professional capacity of the nursing staff of a public hospital. *GESTIONES*, 1(1), 1–10. Retrieved from <https://gestiones.pe/index.php/revista/article/view/57>
- Cabezas (2000). The quality of life of professionals, review of continuing medical education, 7. pp. 53-68
- Caján Villanueva M. (2022). Management of working conditions and motivation of nurses in a hospital at the beginning of 2020. *GESTIONES*, 2(1), 1–8. Retrieved from <https://gestiones.pe/index.php/magazine/article/view/59>
- Caján Villanueva M., Calderón Torres NA, Administrator. (2021). Metadata, health system and pension regimes of Peruvian artists in the context of Covid-19. *GESTIONES*, 1(1), 1–9. Retrieved from <https://gestiones.pe/index.php/revista/article/view/GESTIONES>
- Chávez Taípe YV, Micha Aponte RS, Soto Espichan AA (2022). Management of recreational activities and job performance of teachers in a health institution. *GESTIONES*, 2(1), 1–9. Retrieved from <https://gestiones.pe/index.php/revista/article/view/60>



- Contreras V., Silva C., Díaz J., Muñoz F., Faúndez-Casanova C., Gallardo F. (2022). Nutritional status, level of physical activity and eating habits in university students in the Maule Region during the COVID-19 pandemic. *Retos*, 46, 604–612. <https://doi.org/10.47197/retos.v46.91992>
- De La Rosa M., Webb M., Fesperman F., Johnston L. (2018). Professional quality of life normative benchmarks. *Psychological Trauma: Theory, Research, Practice, and Policy*. Retrieved from <http://dx.doi.org/10.1037/tra0000263>
- Espinoza Vásquez G., Juárez-Gutierrez RE (2022). The organizational climate and user satisfaction when receiving care in a municipality. *GESTIONES*, 2(1), 1–11. Retrieved from <https://gestiones.pe/index.php/journal/article/view/42>
- Garay Paucar EZ, Calderón Torres NA, Vargas Montejo C. (2021). Emotional balance and resolution strategies in the staff of a municipality. *GESTIONES*, 1(1). Retrieved from <https://gestiones.pe/index.php/magazine/article/view/52>
- Garay Paucar EZ, Chávez Taípe YV, Atachao Mallqui JC (2022). Execution of public works and management by results in a regional government in Peru. *GESTIONES*, 2(1), 1–8. Retrieved from <https://gestiones.pe/index.php/revista/article/view/55>
- Garg, A., Cull, W., Olson, L., et al. (2019). Screening and referral for low-income families' social determinants of health by US pediatricians. *Acad Pediatr*. <https://doi.org/10.1016/j.acap.2019.05.125>
- Johnson, K., & Lee, J. (2022). Burnout in healthcare: A systematic review and meta-analysis. *Journal of Occupational Health*, 64(4), e12375. <https://doi.org/10.1002/1348-9585.12375>
- Hafsa Habebh and Suril Gohel (2021). Machine Learning in Healthcare. Published on: 24 November, 2021 DOI: 10.2174/1389202922666210705124359
- Harten, N., & Leach, A. (2020). The role of motor development in children's lives. *Child Development*, 91(4), 1089-1102. <https://doi.org/10.1111/cdev.13321>
- Oliveira J. (2019). Professional satisfaction and work overload of nurses in the mental health area. *Ciência & Health Collective*. Retrieved from <https://doi.org/10.1590/1413-81232018247.20252017>
- Rodriguez-Diaz A., Vidal-Ledo M., Delgado-Ramos A., Martinez-Gonzalez B. Cloud computing, a vision for health in Cuba. *Journal of Scientific Information for Health Management*. INFODIR. 2018 [accessed 21/02/2022]; (26). Available at: <http://www.revinfodir.sld.cu/index.php/infodir/article/view/458>
- Rojas-Espinoza JB, Martinez-Talavera BE, Cárdenas-Becerril L., Benhumea Jaramillo LI, Gómez BA, Kempfer SS (2022). Action research in pedagogical practices on care instruction: teaching experience. *Global Nursing*, 21(65), 351-379. Epub March 28, 2022. <https://dx.doi.org/10.6018/eglobal.480671>
- Sullivan, P.J., & Kearney, P. (2021). Leadership in sport: The role of communication. *Journal of Applied Sport Psychology*, 33(2), 150-165. <https://doi.org/10.1080/10413200.2020.1714558>
- Vidal-Ledo M., Carnota-Lauzán O., Rodríguez-Díaz A. Disruptive technologies and innovations. *Educ Med Super*. 2018 [accessed 21/02/2022]; 33(1). Available at: <http://www.ems.sld.cu/index.php/ems/article/view/1745>



- Wang, C.K.J., & Hodge, K. (2020). Transformational leadership in sport: A systematic review. *Sport Management Review*, 23(2), 165-183. <https://doi.org/10.1016/j.smr.2019.02.001>
- Ying L., Yupin A. (2019). Work stress, perceived social support, self-efficacy and burnout among Chinese registered nurses. *Journal of Nursing Management*. Retrieved from Wiley Online Library.

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