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# Addressing all the psychosocial risk factors in the workplace requires a comprehensive and interdisciplinary strategy and specific tools

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#### **Abstract**

The growing importance of psychosocial risks in workplaces underscores the necessity of prioritizing employees' mental well-being. These risks, stemming from inadequate work design and organization, result in significant adverse outcomes across various sectors. A comprehensive analysis of this issue is crucial to address emerging challenges and promote workers' psycho-physical health. This study explores the definition and identification of psychosocial risks, encompassing workplace harassment, violence, critical service events, emotional demands, and contextual factors like workrelated stress. Emerging global challenges, such as the COVID-19 pandemic, affect work organizations, impacting employee psycho-physical stress. Novel work paradigms and digital technologies add complexity. Work-related stress and high emotional demands can lead to chronic stress adaptation disorders, anxiety, depression, and Post-Traumatic Stress Disorder (PTSD), mainly affecting healthcare professionals. ISO 45003 advocates a holistic approach to psychosocial risk assessment, ensuring workers' mental well-being. The Copenhagen Psychosocial Questionnaire (COPSOQ) offers a validated tool adaptable to various contexts, but comprehensive validation is lacking. Assessing critical service events, violence, and early intervention can mitigate distress. Multidisciplinary teams, including physicians, psychologists, and ergonomists, are vital to address complexity. Health surveillance, guided by competent professionals, gains importance. Beyond risk assessment, it aids in early issue detection and psychological support. In conclusion, managing psychosocial risks requires a collective commitment to create a health-supportive work environment. Comprehensive evaluation, supported by robust tools and health surveillance, safeguards mental well-being and nurtures a culture attuned to psycho-physical health.

**Take-home message:** Promoting workplace well-being demands a dual approach: A comprehensive strategy to assess diverse psychosocial risks and deploy precise tools like COPSOQ. A harmonious

interplay between strategy and tools ensures holistic management of these complex workplace challenges.

**Key words:** Burnout; COPSOQ; ISO 45003; occupational health surveillance; psychosocial risk factors; risk assessment; work-related stress.

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In recent years, the significance of psychosocial risks in occupational settings has steadily grown, as the mental well-being of workers has become a fundamental priority for stakeholders within the occupational sphere. Psychosocial risks stem from inadequate work design, organization, and management modes and can result in severe psychological, physical, and social consequences across all employment sectors [1]. Consequently, it is crucial to thoroughly analyze this issue to address emerging challenges and formulate tangible solutions to support the psycho-physical well-being of workers.

### Definition and identification of psychosocial risks

Psychosocial risks within the workplace are diverse and encompass harassment and workplace violence (such as mobbing or "lateral violence," acts of physical, verbal, or sexual aggression by colleagues, superiors, and clients), "critical service events," which involve incidents with a high risk of psycho traumatic stress (typical of first responders and law enforcement personnel), emotional demands and work, specific of helping professions and jobs involving public contact, which are relevant in the etiology of the so-called "vicarious trauma" and "burnout syndrome," as well as context and content factors related to work organization, which define the so-called "work-related stress" (WRS). However, emerging risk factors driven by the global socio-economic crisis and climate changes, such as the COVID-19 pandemic, profoundly impact work organizations and can contribute to elevated levels of psycho-physical stress within the workforce. New forms of work organization (e.g., agile work or "smart working") and new information technology and digital technologies present further challenges to the health and well-being of workers within work environments [2-4].

From a clinical perspective, WRS and high emotional demands can lead to, among other adverse psychopathological effects, chronic stress adaptation disorder, symptoms of anxiety and depression, and Post-Traumatic Stress Disorder (PTSD). Chronic stress adaptation disorder and PTSD, defined by INAIL (2005), are conditions potentially resulting from work-related stress, mobbing, and organizational constraints [5]. However, establishing a causal relationship is particularly complex, as evidenced by only 500 WRS-related disorders recognized by the Insurance Institute (INAIL) between 2001 and 2011, compared to 4,000 reported cases [6]. In some professions, such as healthcare, numerous psychosocial risk factors may coexist (violence from patients/patient relatives, constant exposure to death and suffering, workload overload, organizational injustice, etc.), mutually potentiating each other. This might explain the concerning stress levels and burnout observed among healthcare professionals. These psychopathological disorders can compromise the quality of care and the doctor-patient relationship and can have devastating effects on the well-being of workers and work organizations. Burnout has been associated, even before the COVID-19 pandemic, with high turnover rates among healthcare workers and increased suicidal tendencies [7,8].

## Global approach to psychosocial risk assessment

ISO 45003 and New Models of Psychosocial Risk Assessment The technical standard ISO 45003 [9], a part of ISO 45001 focused on workplace health and safety, emphasizes the importance of a comprehensive strategy to address all psychosocial risk factors in the occupational context. This standard provides employers with a valuable framework for developing effective management systems that safeguard workers' mental health. Employers can also fulfill the minimum regulatory

obligations stipulated by European Union Health and Safety Regulations through a health and safety management system. As the ISO 45003:2021 standard suggests, a "comprehensive management of psychosocial risks" is an effective strategy to enhance workers' physical and mental engagement. Thus, preventing WRS could potentially have positive effects not only on preventing workplace violence (mobbing, harassment, threats, bullying, physical assaults, etc.) but also on safeguarding gender diversity. In Italy, a recent law (Law No. 4/2021) also explicitly require the assessment of the risk of workplace violence.

However, to date, no validated methodological tool comprehensively addresses all the aforementioned psychosocial risk factors. In literature, one of the most established tools for measuring psychosocial risk factors in the workplace is the Copenhagen Psychosocial Questionnaire (COPSOQ) [10]. The COPSOQ, a free instrument available in over 25 languages, developed by Kristensen and Borg in 2000, includes items from important occupational stress models, such as the Job Strain, the "Demand-Control-Support" model by Karasek, and the "Effort Reward Imbalance" model by Siegrist. The latest version of the tool (COPSOQ III) contains 84 items covering all the foremost internationally recognized psychosocial risk factors related to work organization (including "work-family conflict") and emotional demands. COPSOQ III also incorporates effect indicators measuring job satisfaction, burnout, work engagement, intention to leave the job, overall health status, presenteeism, and inability to rest [11].

The third version of the COPSOQ questionnaire (COPSOQ III) was developed for three main reasons: 1) Changes in the work environment: Due to increasing globalization and computerization, exacerbated by the 2008 economic crisis, work conditions have changed. These changes have led to a higher prevalence of management models with lower trust, worsening work conditions in certain countries, and increased precarious work with flexible hours and employment instability. 2) New theories: The Job Demand-Resources model and the concept of social capital have highlighted the need for a broader perspective on occupational health, considering not only demands and resources but also outcomes like productivity and turnover. Additionally, the theory of stress as an attack on the self ("SOS") has highlighted how task allocation and work circumstances can be sources of stress. 3) International experience with COPSOQ: The questionnaire has been used in various countries, but experience has shown the need for adaptations and revisions to account for different national, cultural, and work-related realities. These reasons have led to broader coverage of critical concepts in the updated COPSOQ III version, making the questionnaire more suitable for current work conditions and international requirements [11]. In the original version of COPSOQ III, some psychosocial risk factors not directly linked to work organization, such as violence and bullying, were included, while exposure to critical events was not specifically considered. However, COPSOQ allows the integration of "core items" with other items established by "national COPSOQ teams" in various countries where the tool can be translated and validated. Consequently, upon translation and validation within a representative Italian national sample, this tool could meet the quality criteria required by ISO 45003. Psychosocial risk assessment must be approached comprehensively, considering all psychosocial risk factors in the work environment. However, risk assessment strategies in Italy and EU countries primarily focused on WRS assessment [3].

## Proposals and research directions

To achieve significant results, psychosocial risk assessment should not be confined to WRS assessment alone. Still, it should also encompass the evaluation of emotional demands, which, in certain occupational activities, heighten the risk of burnout [2]. In some work sectors (e.g., first responders, police officers, firefighters, etc.), a psychosocial risk assessment should also enable predicting and managing critical service events through appropriate post-critical event management procedures. Workplace violence should be assessed and managed with prevention and protection measures extending beyond "security" aspects. Psychosocial risk assessment should be integrated and comprehensive, encompassing distress indicators (such as burnout), psycho-physical well-being, and all psychosocial risk factors. This strategy would also enable the assessment of the trajectory of distress and psycho-physical well-being levels in an organization over time, following the

implementation of prevention measures and, consequently, the effectiveness of the measures employed. COPSOQ could also help evaluate the effects resulting from the interaction of multiple psychosocial risk factors, including workplace violence. Workplace violence, indeed, can be associated with high levels of work-related stress and burnout [12,13], and individual coping and stress management strategies can be determinants in the onset of psychological disorders, especially in events with lower psycho-traumatic impact. Therefore, only an integrated and multidisciplinary approach can address the complexity of psychosocial risk. For this reason, it would be desirable to establish interdisciplinary teams within occupational health services involving occupational physicians, occupational psychologists and therapists, and ergonomists in assessing and managing all psychosocial risks [14].

#### The role of occupational health surveillance

A critical aspect of managing psychosocial risks involves engaging competent medical professionals and activating health surveillance. In the assessment of WRS according to the INAIL/ISPESL model, the role of health surveillance is residual and limited to reporting, in the risk assessment phase, complaints and the number of requests for medical examination made to the competent physician for situations of psychosocial discomfort in the work environment ("sentinel event" of WRS). In reality, in workplaces where it is established, the competent physician is first obliged to collaborate in risk assessment. Based on risk assessment, health surveillance can be activated as an effective preventive measure to manage residual risk after the application of primary prevention measures (which operate at an "organizational," "technological," and "procedural" level).

According to the VA.RI.BO model [15], for instance, the competent physician, through administering a burnout measurement tool to exposed workers, can collaborate in risk assessment by collecting and epidemiologically processing anonymous collective data from medical visits (as required by Legislative Decree 81/08). A specific surveillance program for workers potentially exposed to critical service events or incidents of workplace violence could also be beneficial in detecting any health issues early, even though "worker-requested" medical visits for individuals exposed to violence or psycho-traumatic events. The involvement of occupational physicians, with the support of occupational psychologists, could be crucial in preventing and early diagnosing symptoms of PTSD. A "holistic" role of health surveillance, as demonstrated during the COVID-19 pandemic in managing post-COVID-19 syndrome upon return to the workplace [8], through health promotion activities and collaboration in risk assessment, can be effective in enhancing workers' "overall" health levels.

In conclusion, the assessment and management of psychosocial risks in the workplace pose a significant challenge to promoting a healthy and safe work environment. Addressing psychosocial risks requires a comprehensive approach and the involvement of all occupational stakeholders. As highlighted by ISO 45003, a global strategy is relevant to ensure the implementation of effective management systems. Only through joint efforts of all occupational stakeholders can workers' mental health be provided, and a corporate culture oriented towards workers' psycho-physical well-being be fostered.

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#### References

- 1. EU-OSHA. Rischi psicosociali e stress nei luoghi di lavoro. [cited 2023 Aug 10]. Available from: https://osha.europa.eu/it/themes/psychosocial-risks-and-stress.
- 2. Chirico F. The forgotten realm of the new and emerging psychosocial risk factors. J Occup Health. 2017;59(5):433-435. doi: 10.1539/joh.17-0111-OP.
- 3. Chirico F. The assessment of psychosocial risk: only "work-related stress" or something else? Med Lav. 2015 Jan 9;106(1):65-66.
- 4. Chirico F, Zaffina S, Di Prinzio RR, Giorgi G, Ferrari G, Capitanelli I, et al. Working from home in the context of COVID-19: A systematic review of physical and mental health effects of teleworkers. J Health Soc Sci. 2021;6(3):319-332. doi: 10.19204/2021/wrkn8.
- 5. Pappone P, Citro A, Natullo O, Del Castello E. Patologia psichica da stress, mobbing e costrittività organizzativa. Roma; INAIL; 2005. https://www.inail.it/cs/internet/docs/alg-patologia-psichica-da-stress.pdf.
- 6. INAIL. Malattie da stress lavoro correlato: un fenomeno complesso da valutare. 27/10/2011 [cited 2023 Aug 10]. Available from: https://www.inail.it/cs/internet/comunicazione/news-edeventi/news/p1169150120\_malattie\_da\_stress\_lavoro\_co.html.
- 7. Chirico F, Leiter M. Tackling stress, burnout, suicide, and preventing the "Great resignation" phenomenon among healthcare workers (during and after the COVID-19 pandemic) for maintaining the sustainability of healthcare systems and reaching the 2030 Sustainable Development Goals. J Health Soc Sci. 2022;7(1):9-13. doi: 10.19204/2022/TCKL1.
- 8. Dutheil F, Aubert C, Pereira B, Dambrun N, Moustafa F, Mermillod M, et al. Suicide among physicians and healthcare workers: A systematic review and meta-analysis. PLoS One. 2019 Dec 12;14(12):e0226361. doi: 10.1371/journal.pone.0226361.
- 9. ISO 45003:2021. Occupational health and safety management- Psychological health and safety at work-Guidelines for managing psychosocial risks. [cited 20223 Aug 10]. Available from: www.iso.org/standard/64283.html.
- 10. COPSOQ International Network. Validation studies [cited 2023 Aug 10]. Available from: https://www.copsoq-network.org/validation-studies/.
- 11. Burr H, Berthelsen H, Moncada S, Nubling M, Dupret E, Demiral Y, et al. The Third Version of the Copenhagen Psychosocial Questionnaire. Saf Health Work. 2019 Dec;10(4):482-503. doi: 10.1016/j.shaw.2019.10.002. Epub 2019 Nov 6.
- 12. Wang J, Zeng Q, Wang Y, Liao X, Xie C, Wang G, et al. Workplace violence and the risk of post-traumatic stress disorder and burnout among nurses: A systematic review and meta-analysis. J Nurs Manag. 2022 Oct;30(7):2854-2868. doi: 10.1111/jonm.13809
- 13. Magnavita N. Workplace violence and occupational stress in healthcare workers: a chicken-and-egg situation-results of a 6-year follow-up study. J Nurs Scholarsh. 2014 Sep;46(5):366-76. doi: 10.1111/jnu.12088.
- 14. Chirico F. Normativa, criticità e valutazione del rischio psicosociale lavorativo in Italia [Psychosocial hazards in the workplace: Regulations, challenges and risk assessment in Italy]. G Ital Psicol Med. 2022;2(1):1-5.
- 15. Chirico F, Taino G, Magnavita N, et al. Proposal of a method for assessing the risk of burnout in teachers: the VA.RI.B.O strategy. G Ital Med Lav Erg. 2019;41(3):221-235..



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