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Occupational Stress in Healthcare: A Narrative Exploration of Determinants and Coping Strategies

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ABSTRACT

Occupational stress among healthcare professionals is a complex phenomenon influenced by various determinants. This review explores the prevailing factors that contribute to occupational stress and the coping strategies adopted by healthcare professionals to tackle occupational stress. Stress in healthcare settings is highly influenced by factors such as high patient volume, work overload, and challenging work environments. The aim of the study is to comprehensively explore the varied nature of occupational stress in healthcare professionals and its determinants, coping strategies, and potential gender-related influences. A literature review was conducted, surrounding studies from diverse geographical regions and healthcare professions. Eight studies that provide a global perspective on occupational stress among healthcare professionals were found to meet the inclusion criteria. The results reveal that occupational stress is influenced by factors such as workload, role conflicts, administrative burdens, interpersonal conflicts, and a lack of rewards and recognition. These stressors affect professionals at various levels in their career, emphasizing the dynamic nature of stress in healthcare. Coping strategies employed by healthcare professionals range from problem-solving and positive attitudes to emotion-focused mechanisms. Resilience plays a pivotal role in adoption of healthy and adaptive coping strategies. Comprehending the interplay of the stressors and coping strategies is important for understanding their effects on healthcare professionals and their well-being and, subsequently, patient care. The review contributes to the existing knowledge by synthesizing determinants and coping strategies. It offers insights for future research and evidence-based interventions purposes. Recognizing the complexity of occupational stress and coping in healthcare is crucial for fostering a more healthier work environment for the healthcare professionals and improving overall outcomes of healthcare and healthcare system.

Keywords: Occupational stress, burnout, healthcare professionals, factors

1. Introduction

Stress is a physiological and psychological response to a perceived threat or challenge. It is the human body's response to situations in life that require change. Stress is a condition or feeling experienced when a person perceives that demands exceed the personal and social resources the individual is able to mobilize (Lazarus & Folkman, 1984). Occupational stress is the physiological or psychological response of employees due to the lack of ability to cope with their work demands due to various challenges in their work and workplace (Maslach et al., 2001). Occupational stress can give rise to a range of indications affecting the worker's emotional well-being, cognitive functioning, attitude, and physiological responses, ultimately affecting both mental and physical health of the individual.

Healthcare settings pose specific vulnerabilities to occupational stress, burnout, and job dissatisfaction due to heightened patient volume and elevated ratios of patients to healthcare professionals. (Xie, Wang, & Chen, 2011). Healthcare professionals include physicians, nursing practitioners, physiotherapists, dentists, psychologists, occupational therapists etc. Healthcare professionals experience significant stressors in their work, dealing with several factors such as demanding psychological and physical aspects, long shifts, low pay grade etc (Aiken et al., 2013). Interactions with the patients with the pressure of meeting their high demands in respect to providing care and help while meeting the expectations of their loved ones appears taxing (Kowalska et al., 2021). Due to the need of long-term interventions in almost all of the healthcare settings, the healthcare personnel develop a personal interest in the patient's well-being. This might cause disappointment upon halting progress in the recovery, limited advancement during the treatment and significantly affect the healthcare professional's psychological state. Role conflict is also a contributing factor associated with emotional exhaustion among healthcare professionals.

A study conducted in Poland found that physiotherapists reported higher levels of stress, increased burnout, lower life satisfaction, diminished job satisfaction, and a higher incidence of musculoskeletal problems across all genders (Mikołajewski et al., 2023). In a cross-sectional study in Poland, physiotherapists exhibited a mean stress level of 18.0 (SD = 6.5), with 40% reporting high stress; notably, no significant gender-based differences in stress levels were observed among the respondents (Kowalska et al., 2021). In contrast, research conducted in Ghana indicated a higher prevalence of

stress among female respondents (70.1%) compared to males (68.2%) within the healthcare worker population in hospitals. The study included diverse healthcare professionals such as Physicians, Nurses/midwives, Pharmacists, Laboratory scientists, and Radiographers (Odonkor & Adams, 2021).

In an Indonesian research study, stress levels varied among health professionals, with nurses reporting the highest work stress (66.67% moderate, 7.84% high), followed by doctors (70% moderate, 0% high), and midwives (34.69% moderate, 0% high) (Pello et al., 2021). A study in Switzerland revealed that health professionals in upper- and middle-management positions experienced higher quantitative demands and severe work—life conflicts, while those in lower-management positions reported elevated physical and emotional demands, stress symptoms, and job dissatisfaction (Peter et al., 2020).

A cross-sectional study in Spain revealed that physiotherapists exhibited a significant correlation between occupational stress and the emotional exhaustion (EE) and depersonalization (DP) dimensions of burnout (Carmona-Barrientos et al., 2020). In a cross-sectional study in Canada, healthcare staff showed a high prevalence of distress, with 56% reporting scores consistent with high distress and 29% with severe distress (Rubin et al., 2021). In China, a study revealed that palliative nurses exhibit resilience, strong social support, moderate self-efficacy, and a prevailing positive coping style (Zhang et al., 2022).

In conclusion, this review investigates the determinants influencing occupational stress among healthcare professionals and explores the coping strategies that they employ. The need to offer a comprehensive insight into the factors that influence the psychological well-being of healthcare professionals is inevitable.

2. Methodology:

2.1 Aim:

The study aims to investigate various aspects of occupational stress among healthcare professionals, with a focus on identifying determinants, exploring coping strategies, and establishing potential relationships with gender through review of literature.

2.2 Problem Questions:

- What are the determinants and factors contributing to occupational stress among healthcare professionals? How do factors such as workload, demands, and work culture influence occupational stress in the healthcare professionals?
- What are the commonly employed strategies by healthcare professionals to cope with the challenges of occupational stress?

2.3 Data Collection:

A keyword search-based literature review was conducted using databases including PubMed, PsychInfo, ScienceDirect and Google Scholar to cover a broad range of topics by using studies of different design. Studies with titles or abstracts containing "Occupational Stress" (OR "Burnout" OR "Stress") AND "Health Care Professional" (OR "Health Profession"). Other sources were found through snowballing search methodology, the list of references of other research articles and reviews. Inclusion criteria were the English language, empirical research and studies carried out among health care professionals like physicians, nurses, physiotherapists etc. Literature published between the time frame 2017 and 2023 were only considered. (see appendix 1)

Table 1 - Inclusion and exclusion criterion.

Inclusion Criteria	Exclusion Criteria
English language	Non- English Language
Empirical research-based	Non- Empirical research-based
Direct relevance to the review topic and objectives.	Inconsistency with study objectives.
Sample consisting of healthcare workers.	Insufficient detail.
	Varied demographics.

3. Results:

A total of 8 studies were selected for this review. Out of these, Four studies were done in Europe (Poland, Switzerland, Spain), Two were done in Asia (China, Indonesia), One was done in Africa (Ghana) & Americas (Canada) each (see appendix 2). The objectives of these studies were to determine the level of stress, prevalence of burnout syndrome among healthcare professionals. The results of this comprehensive review clarify the predominant determinants influencing occupational stress and the diverse coping strategies embraced by healthcare professionals. Through an examination of these studies, it becomes evident that occupational stress within the healthcare sector is significantly correlated with factors such as requisites of patient care, substantial workloads, temporal constraints. Furthermore, the wide range of coping mechanisms employed encompasses strategies that are considered positive such as seeking social support.

4. Discussion:

The review on the prevailing determinants of occupational stress and coping strategies among healthcare professionals has given a number of factors influencing the well-being of individuals within this demanding sector. The challenges faced by healthcare professionals in their daily work is staggering.

In healthcare settings, occupational stress and burnout becomes a prominent challenge in their career. The experience of distress and discomfort varies across different phases of their professional journey. During their early stages in the career, healthcare professionals' need of establishing themselves in the role and gaining a name for them in the field might be stressful. After a few years into the role, they may find it difficult to balance patient care, administrative or managerial responsibilities and personal life. The level of stress may vary based on their different hierarchical levels. Studies indicate that professionals in a higher hierarchy, when compared to the subordinates they supervise, exhibit fewer symptoms of stress and an enhancement of health status (Lundqvist et al., 2013; Marmot et al., 1991). Healthcare professionals without a management role reportedly have a higher level of job insecurity (Peter et al., 2020). Years into the career, health care professionals are expected to keep up with the new advancements, technologies which might be stressful for them given that healthcare is rapidly evolving on a daily basis (Thimbleby, 2013). Senior healthcare professionals might face stress related to impending retirement as well.

Occupational stress in physicians arises from the unpredictability of medical scenarios (Kumar, 2016) and concerns about maintaining a high standard of treatment. Two-thirds of the healthcare workers usually suffer medium to high levels of occupational stress (Carmona-Barrientos et al., 2020). Reduced quality of sleep (Peter et al., 2020), expectation to be fast, precise and deft (Pello et al., 2021), lack of rewards at work (Wójtowicz & Kowalska, 2023), lack of opportunity for promotion (Godwin et al., 2016), family-work balance (Wiskow, 2010) were the major stressors in healthcare settings.

Based on our review, it could be reported that occupational stress in healthcare professionals could be shaped by a variety of factors. These factors include elements such as excessive work demands, stress arising from the intersection of work and home life, interpersonal dynamics at work, insufficient educational preparation, and challenging job conditions (Carmona-Barrientos et al., 2020). Other contributors to occupational stress involve the pressure of meeting quantitative expectations and issues related to job responsibilities (Peter et al., 2020). Furthermore, stress levels can be influenced by factors such as employment instability and leadership responsibilities (Gonçalves et al., 2019). Notably, predictors of burnout syndrome among healthcare workers include inadequate sleep, a lack of recognition, and being in a trainee role (Ahmad et al., 2019).

4.1 Workload & Workshift

Heavy workloads are a major stressor for workers in healthcare settings (Ahmad et al., 2019; Peter et al., 2020; Odonkor & Adams, 2021). Average working hours among healthcare professionals are typically higher (Lin et al., 2021). This situation paired with inadequate staffing levels, scarcity of resources and expanding roles significantly promote work-related stress (Jones et al., 2015). Long working hours indicate less sleeping hours which is a major predictor of burnout symptoms (Ahmad et al., 2019; Lin et al., 2021). Moreover, healthcare workers comply with the rigorous schedule as they believe that it allows them to provide better care for the patients and it makes them better equipped for any risk of complications or emergencies later (Vaughn & Snively, 2023). The frequent changes in the work shift can disrupt the circadian rhythm of the worker and affect the overall well-being (Odonkor & Adams, 2021). Further, there is also a high expectation on the healthcare workers and an extensive burden (Peter et al., 2020; Pello et al., 2021; Odonkor & Adams, 2021)

4.2 Role Conflict & Ambiguity

A study conducted in Saudi Arabia reported that role conflict and ambiguity were associated with stress among healthcare professionals (Alyahya et al., 2021). It has an extended impact on the professionals' psychological well-being (Ahmad et al., 2019; Peter et al., 2020; Kowalska et al., 2021). Frequent modifications and discrepancies in guidelines and protocols might be stressful for the healthcare workers (Xu et al., 2020; Li et al., 2020).

4.3 Administrative Burdens

Healthcare professionals are required to document every single move since that helps in improving the patient's care in immediate and far into the future. It helps in giving insights into previously diagnosed conditions which helps the healthcare professionals determine the best course of treatment plan ("Importance of Medical Records in Patient Care & Amp; Outcomes," 2023). Senior healthcare workers are also expected to teach and train the junior professionals (Ahmad et al., 2019).

4.4 Interpersonal Conflicts

Conflict between other health professionals, supervisors, or patients and their families was another common source of stress in the workplace (Ahmad et al., 2019; Peter et al., 2020; Odonkor & Adams, 2021; Kowalska et al., 2021; Pello et al., 2021). Lack of autonomy seems to be a major reason for emergence of conflicts between superior and subordinates in healthcare settings (Fällman et al., 2019). Lack of appropriate leadership can cause conflicts (Ghiasipour et al., 2017). The disturbance in organizational culture (Joshi et al., 2023) & work environment (Koinis et al., 2015) causes stress among healthcare workers.

4.5 Lack of Rewards & Recognition

Lack of proper rewards (Ahmad et al., 2019), recognition (Kowalska et al., 2021; Pello et al., 2021), remuneration, opportunities (Kowalska et al., 2021), feedback (Peter et al., 2020) account for the majority of stress and burnout among healthcare workers. Effort-reward imbalance is a crucial factor contributing to the deterioration of the health status among healthcare workers (Darboe et al., 2016). It was reported that there is a significant correlation between effort-reward imbalance and self-rated health among healthcare professionals (Ge et al., 2021).

4.6 Other stressors

Dealing with the loss of patients (Ahmad et al., 2019), lack of social & emotional support (Odonkor & Adams, 2021), feeling of threat (lawsuits, infections, violence) (Kowalska et al., 2021) were also observed as some stressors in the review.

4.7 Coping strategies

Coping refers to the cognitive and behavioral responses displayed to manage, endure, and alleviate stress (Folkman & Lazarus, 1980). The utilization of coping strategies had significant consequences for individuals' professional identity and occupational behavior (Rubin et al., 2021). Positive coping helps lessen the impact of work stress on job performance, while negative coping worsens the negative effects (Maresca et al., 2022). Healthcare professionals experience burnout in challenging situations when they employ coping strategies centered more on emotions and less on addressing the underlying problems (Mikołajewski et al., 2023). Problem solving, positive attitudes, cognitive flexibility, and optimism were some of the positive coping mechanisms that the healthcare professionals employ (Zhang et al., 2022). A common approach to dealing with challenges involves using problem-solving behaviors and positive thinking to reevaluate and find meaning in stressful situations (Lourenção et al., 2022). The cultivation of resilience can also support the embrace of constructive coping strategies (Finstad et al., 2021). To effectively manage stress, it is crucial to incorporate training that focuses on addressing the root causes of stress and enhancing one's perception of control over the situation (Mikołajewski et al., 2023). This comprehensive approach helps us better understand how healthcare professionals manage stress and contribute to their well-being.

5. Conclusion:

The review concludes that the patterns of occupational stress among healthcare professionals often revolves around workload & workshift, role conflict & ambiguity, administrative burdens, interpersonal conflicts and lack of rewards & recognition. An important finding of this review is the significance of recognizing the interrelation of these stressors, raising the urge to understand their impact collectively on healthcare professionals. The discussion further explains the implications of these determinants, highlighting their potential to not only jeopardize the physiological and psychological well-being of healthcare professionals but also impact the quality of patient care and the overall healthcare system.

In exploring coping strategies, the review signifies the positive and adaptive strategies healthcare professionals employ to eliminate or cope with these stressors. The review elucidates the varied approaches, ranging from problem-based techniques to emotion-based mechanisms. The review's synthesis of determinants and coping strategies contributes to the existing body of knowledge, offering insights that can inform future research directions and evidence-based interventions. By understanding the complexity of occupational stress and coping within the healthcare profession, healthcare systems can work collaboratively to develop targeted strategies aimed at enhancing the resilience and well-being of healthcare professionals, ultimately fostering a more healthier work environment and improving patient outcomes.

References

Ahmad, A. A., Ali, A., Bahgat, S., & Shouman, W. (2019). Prevalence, associated factors, and consequences of burnout among ICU healthcare workers: an Egyptian experience. *Egyptian Journal of Chest Diseases and Tuberculosis*, 68(4), 514. https://doi.org/10.4103/ejcdt.ejcdt_188_18

Aiken, L. H., Sloane, D. M., Bruyneel, L., Van den Heede, K., Sermeus, W., & Consortium, R. C. (2013). Nurses' reports of working conditions and hospital quality of care in 12 countries in Europe. *International Journal of Nursing Studies*, 50(2), 143–153. https://doi.org/10.1016/j.ijnurstu.2012.11.009

Alyahya, S., Al-Mansour, K., Alkohaiz, M. A., & Almalki, M. A. (2021). Association between role conflict and ambiguity and stress among nurses in primary health care centers in Saudi Arabia during the coronavirus disease 2019 pandemic. *Medicine*, 100(37), e27294. https://doi.org/10.1097/md.00000000000027294

Carmona-Barrientos, I., Gala-León, F. J., Lupiani-Giménez, M., Cruz-Barrientos, A., Lucena-Antón, D., & Moral-Muñoz, J. A. (2020). Occupational stress and burnout among physiotherapists: a cross-sectional survey in Cadiz (Spain). *Human Resources for Health*, 18(1). https://doi.org/10.1186/s12960-020-00537-0

Darboe, A., Lin, I., & Kuo, H. W. (2016). Effort-reward imbalance and self-rated health among Gambian healthcare professionals. *BMC Health Services Research*, 16(1). https://doi.org/10.1186/s12913-016-1347-0

Fällman, S. L., Jutengren, G., & Dellve, L. (2019). The impact of restricted decision-making autonomy on health care managers' health and work performance. *Journal of Nursing Management*, 27(4), 706–714. https://doi.org/10.1111/jonm.12741

Finstad, G. L., Giorgi, G., Lulli, L. G., Pandolfi, C., Foti, G., León-Pérez, J. M., Sánchez, F. J. C., & Mucci, N. (2021). Resilience, Coping Strategies and Posttraumatic Growth in the workplace Following COVID-19: A Narrative review on the positive aspects of trauma. *International Journal of Environmental Research and Public Health*, 18(18), 9453. https://doi.org/10.3390/ijerph18189453

Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a Middle-Aged Community sample. *Journal of Health and Social Behavior*, 21(3), 219. https://doi.org/10.2307/2136617

Ghiasipour, M., Mosadeghrad, A. M., Asgari, M., & Jaafaripooyan, E. (2017). Leadership challenges in health care organizations: The case of Iranian hospitals. *Medical Journal of the Islamic Republic of Iran*, 31(1), 560–567. https://doi.org/10.14196/mjiri.31.96

Godwin, J., "Visualizing systematic literature reviews to identify new areas of research," 2016 IEEE Frontiers in Education Conference (FIE), Erie, PA, USA, 2016, pp. 1-8, doi: 10.1109/FIE.2016.7757690

Ge, J., He, J., Liu, Y., Zhang, J., Pan, J., Zhang, X., & Liu, D. (2021). Effects of effort-reward imbalance, job satisfaction, and work engagement on self-rated health among healthcare workers. *BMC Public Health*, 21(1). https://doi.org/10.1186/s12889-021-10233-w

Gonçalves, A., Fontes, L., Simães, C., & Gomes, A. R. (2019). Stress and burnout in health professionals. In *Studies in systems, decision and control* (pp. 563–571). https://doi.org/10.1007/978-3-030-14730-3_60

Importance of Medical Records in Patient Care & Outcomes. (2023, September 14). Health-e. https://health-e.in/blog/importance-of-medical-records

Joshi, K., Modi, B., Singhal, S., & Gupta, S. (2023). Occupational Stress among Health Care Workers. In *IntechOpen eBooks*. https://doi.org/10.5772/intechopen.107397

Koinis, A., Giannou, V., Drantaki, V., Angelaina, S., Stratou, E., & Saridi, M. (2015). The impact of healthcare workers job environment on their mental-emotional health. Coping strategies: the case of a local general hospital. *Health Psychology Research*, 3(1). https://doi.org/10.4081/hpr.2015.1984

Kowalska, J., Chybowski, D., & Wójtowicz, D. (2021). Analysis of the Sense of Occupational Stress and Burnout Syndrome among Working Physiotherapists—A Pilot Study. *Medicina-lithuania*, 57(12), 1290. https://doi.org/10.3390/medicina57121290

Kumar, S. (2016). Burnout and Doctors: Prevalence, Prevention and intervention. Healthcare, 4(3), 37. https://doi.org/10.3390/healthcare4030037

Lazarus, R. S., & Folkman, S. (1984). Stress, Appraisal, and Coping. Springer Publishing Company.

Li, W., Lin, G., Xu, A., Huang, Y., & Xi, X. (2020). Role ambiguity and role conflict and their ainfluence on responsibility of clinical pharmacists in China. *International Journal of Clinical Pharmacy*, 42(3), 879–886. https://doi.org/10.1007/s11096-020-01053-w

Lin, R., Lin, Y., Hsia, Y., & Kuo, C. (2021). Long working hours and burnout in health care workers: Non-linear dose-response relationship and the effect mediated by sleeping hours—A cross-sectional study. *Journal of Occupational Health*, 63(1). https://doi.org/10.1002/1348-9585.12228

Lourenção, L. G., Rigino, B. M., Sasaki, N. S. G. M. D. S., Pinto, M. J. C., Neto, F. R. G. X., Borges, F. A., De Lourdes Sperli Geraldes Santos, M., Penha, J. G. M., Galvão, D. M., Santos, B. M. P. D., Cunha, I. C. K. O., De Oliveira, J. F., Afonso, M. D. S., Cunha, C. L. F., Da Silva, F. G., Freire, N. P., Nascimento, V. F. D., Rodrigues, S. T., De Carvalho, T. M., . . . Domingos, N. a. M. (2022). Analysis of the coping strategies of primary health care professionals: Cross-Sectional study in a large Brazilian municipality. *International Journal of Environmental Research and Public Health*, *19*(6), 3332. https://doi.org/10.3390/ijerph19063332

Lundqvist, D., Reineholm, C., Gustavsson, M., & Ekberg, K. (2013). Investigating work conditions and burnout at three hierarchical levels. *Journal of Occupational and Environmental Medicine*, 55(10), 1157–1163. https://doi.org/10.1097/JOM.0b013e31829b27df

Maresca, G., Corallo, F., Catanese, G., Formica, C., & Lo Buono, V. (2022). Coping Strategies of Healthcare Professionals with Burnout Syndrome: A Systematic Review. *Medicina-lithuania*, 58(2), 327. https://doi.org/10.3390/medicina58020327

Marmot, M. G., Stansfeld, S., Patel, C., North, F., Head, J., White, I., ... Smith, G. D. (1991). Health inequalities among British civil servants: The Whitehall II study. *The Lancet*, 337(8754), 1387–1393. https://doi.org/10.1016/0140-6736(91)93068-K

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397–422. https://doi.org/10.1146/annurev.psych.52.1.397

Mikołajewski, D., Masiak, J., & Mikołajewska, E. (2023). Selected determinants of occupational stress and burnout in physiotherapists and IT professionals. *Journal of Education, Health and Sport*, 28(1), 62–77. https://doi.org/10.12775/jehs.2023.28.01.004

Odonkor, S. T., & Adams, S. (2021). Predictors of stress and associated factors among healthcare workers in Western Ghana. *Heliyon*, 7(6), e07223. https://doi.org/10.1016/j.heliyon.2021.e07223

Pello, E., Keraf, M. K. P. A., Wijaya, R. P. C., & Berek, N. C. (2021). Occupational stress in medical workers at Naibonat Hospital. *Journal of Health and Behavioral Science*, *3*(3), 312–320. https://doi.org/10.35508/jhbs.v3i3.4132

Peter, K. A., Schols, J. M. G. A., Halfens, R. J., & Hahn, S. (2020). Investigating work-related stress among health professionals at different hierarchical levels: A cross-sectional study. *Nursing Open*, 7(4), 969–979. https://doi.org/10.1002/nop2.469

Rubin, B. B., Goldfarb, R., Satele, D., & Graham, L. (2021). Burnout and distress among allied health care professionals in a cardiovascular centre of a quaternary hospital network: a cross-sectional survey. *CMAJ Open*, 9(1), E29–E37. https://doi.org/10.9778/cmajo.20200059

Thimbleby, H. (2013). Technology and the future of healthcare. *Journal of Public Health Research*, 2(3), jphr.2013.e28. https://doi.org/10.4081/jphr.2013.e28

Vaughn, N., & Snively, E. (2023, December 1). *Extended nurse work hours and patient safety: effects and solutions*. Relias. https://www.relias.com/blog/nurse-work-hours-and-patient-safety

Wójtowicz, D., & Kowalska, J. (2023). Analysis of the sense of occupational stress and burnout syndrome among physiotherapists during the COVID-19 pandemic. *Scientific Reports*, 13(1). https://doi.org/10.1038/s41598-023-32958-x

Wiskow C., Albreht T., de Pietro C. How to Create an Attractive and Supportive Working Environment for Health Professionals. WHO; Copenhagen, Denmark: 2010. pp. 1–37.

Xie Z, Wang A, Chen B. Nurse burnout and its association with occupational stress in a cross sectional study in Shanghai. J Adv Nurs. 2011: 67 (7);1537-46

Zhang, Y., Jiang, J., Zhu, C., Liu, C., Guan, C., & Hu, X. (2022). Status and related factors of burnout among palliative nurses in China: a cross-sectional study. *BMC Nursing*, 21(1). https://doi.org/10.1186/s12912-022-01083-x