WORKPLACE-RELATED BURNOUT PREVALENCE AMONG DIAGNOSTIC RADIOGRAPHERS AT SELECTED PUBLIC AND PRIVATE RADIOGRAPHY DEPARTMENTS IN THE EASTERN CAPE

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INTRODUCTION AND PURPOSE

The constant technological advancement, dynamic working conditions, diverse interactions with patients and other healthcare professionals and a wide scope of practice that radiographers are exposed to contribute to an increase in occupational stress. This can increase the likelihood of workplace-related burnout among radiographers. Workplace-related burnout can manifest in different ways with some people feeling a sense of dissociation, loss of work enthusiasm and feelings of isolation. In addition, it can result in diagnostic radiographers being unable to fulfil their professional obligations to the required level. In turn, this can result in poorer service delivery, increase in errors, low levels of work performance, reduced workforce retention and a decreased level of job satisfaction. However, this phenomenon is not well-researched in diagnostic radiography. Hence, it became pertinent to study this phenomenon as it has repercussions beyond the mental and physical health of diagnostic radiographers which can affect colleagues and patients as well. The objective of the study was therefore to explore and describe the prevalence of workplace-related burnout among diagnostic radiographers at selected public and private radiography departments in the Eastern Cape.

RESEARCH DESIGN AND METHODS

An exploratory-descriptive, cross-sectional survey design was used. Diagnostic radiographers (n=29/35; 82.86%), at two research sites, participated. Data collection was through an electronic self-reporting questionnaire based on the burnout assessment scale (BAT). Data analysis was done as prescribed for the BAT scale, namely distribution frequencies, proportions and norm-referencing, to determine the categorisation of scores as very high, high, average, and low.

RESULTS

The tables below reflect the possible prevalence of burnout amongst the diagnostic radiographers that participated in this study. The findings are presented as a summative score across the research sites to uphold participant anonymity and confidentiality.

Overall workplace-related burnout symptoms among participants

This table shows how many participants scored very high, high, average and low for each of the sub-constructs measured during the data collection process using the burnout assessment tool. Importantly, the total core score is a combination of exhaustion, mental distance, cognitive impairment and emotional impairment. Whereas total secondary considers psychological and physical symptoms that participants may have experienced as outlined in the burnout assessment tool that was used to collect data for this study.

Table 1. Overall workplace-related burnout symptoms

	Exhaustion	Mental distance	Cognitive impairment	Emotional impairment	total core	total secondary
Very high	8 (27.59%)	3 (10.34%)	2 (6.90%)	6 (20.69%)	6 (20.69%)	4 (13.79%)
High	16 (55.17%)	11 (37.93%)	10 (34.48%)	6 (20.69%)	13 (44.83%)	10 (34.48%)
	5 (17 24%)	11 (37 93%)	7 (24 14%)	14 (48 28%)	10 (34 48%)	14 (48 28%)
Average	5 (17.2470)	11 (37.3376)	/ (24.1470)	14 (40.2070)	10 (34.4070)	14 (40.2070)
Low	0 (0%)	4 (13.79%)	10 (34.48%)	3 (10.34%)	0 (0%)	1 (3.45%)
Total n =29 (%)	29 (100%)	29 (100%)	29 (100%)	29 (100%)	29 (100%)	29 (100%)

Overview of secondary symptoms experienced by participants

Categorisation of workplace-burnout symptoms among participants

The findings presented in this stable was determined using a scoring system outlined in the burnout assessment tool user manual. To determine whether the scores for each of the constructs measured are very high, high, average or low, the scores had to be compared to the Flemish norms in the user manual as a South African equivalent does not currently exist. From the table below one would appreciate that the participants scored high for 4 constructs and average for 3. This means that the likelihood of workplace-related burnout among the participants are high.

Table 2. Categorisation of workplace-related burnout symptoms



The two figures below identify the psychological and psychosomatic symptoms that participants experienced due to their symptoms indicative of workplace-related burnout.



Figure 1. Psychological complaints.

DISCUSSION

The are numerous workplace-related factors that can contribute to the above findings. These factors were not measured in this study; however, literature gives us some insight into these factors. Long working hours, demanding workloads, physically and mentally demanding profession, staff shortages, lack of employer support can all increase exhaustion. There is a direct negative impact on patient care practices, quality of service delivery, and workforce wellness because of these factors. The higher exhaustion levels the higher mental distance (i.e., withdrawal from tasks/interactions and lack of enthusiasm) and it is thus not surprising that mental distance and exhaustion are both high among the participants. Factors leading to exhaustion can also result in cognitive impairment, particularly related to the work environment. In turn this can lead to absentmindedness, forgetfulness, poor memory and indecision. The participants in this study only scored at an average level for cognitive impairment which could indicate that they have developed coping mechanisms to counter cognitive impairment, or passion keeps participants motivated to keep going/remain committed to their purpose. Emotional impairment was scored high and again because the exhaustion score is high. Emotional strain due to high-pressure environment, time-sensitive procedures, emotional labour and responsibilities coming with the job as well as the organisational climate/culture can all contribute to emotional impairment. Given that the core symptoms related to workplace-related burnout, participants displayed secondary symptoms associated with burnout as displayed in the two graphs above. The score may be average here because some participants may not have recalled that they had any of the psychological and psychosomatic symptoms or because of their resilient disposition relative to their work that they have developed overtime.



Figure 2. Psychosomatic complaints

RECOMMENDATIONS EMANATING FROM THE STUDY

Given the findings of this study, we propose three recommendations for radiography departments to consider countering the probable high levels of workplace-related burnout among staff.

- Encourage utilisation of the employee wellness programme in the workplace to contain the emotional and psychological symptoms of burnout or advocate for the use of professional help outside of the workplace.
- Consider strategies to enable optimal workplace wellbeing, for example providing incentives, distributing workload equally, having regular check-in meetings with staff, and promoting a culture of peer debriefing.
 - Psychoeducation workshops around managing and coping with burnout and work overload should be organised for radiographers as part of the staff development programme in the department.

REFERENCES

Salerno, S., Tudisca, C., Di Leberto, F., Mantranga, D., La Tona, G., Lo Re, G. & Lo Castro, A. (2017). The burnout phenomenon among student radiographers: a single centre experience. Giornale Italiano di Medicina del Lavoro ed Ergonomia, 39(4), 256-262. Retrieved 7 September 2022 from https://www.researchgate.net/publication/325878343

Schaufeli, W. B. (2017). Burnout: a short socio-cultural history. Burnout, Fatigue, Exhaustion: An Interdisciplinary Perspective on a Modern Affliction, 105-127.Retrieved 22 March 2023, from https://link.springer.com/book/10.1007/978-3-319-52887-8#toc doi: 10.1007/978-3-319-52887-8 5.

WHO (World Health Organization). (2019). World Health Organization widens definition of burnout. *Prospect*, online. Retrieved 4 September 2022, from https://prospect.org.uk/news/worl-health-orginisation-widens-definition-of-burnout definition-of-burnout

Dubale, W. B., Friedman, E. L., Chemali, Z., Denninger, W. J., Mehta, H. D., Alem, A., Fricchione, L, G., Dossett, L. M. & Gelaye, B. (2019). Systemic review of burnout among healthcare providers in sub-Saharan Africa. BMC Public Health. 19(1247), 1-20. Retrieved 16 July 2022 from <u>https://doi.org/10.1186/s12889-019-7566-7</u>

Schaufeli, W.B., De Witte, H. & Desart, S. (2019). Burnout Assessment Tool (BAT) – Test Manual. KU Leuven, Belgium: Internal report. Retrieved 07 September 2022, from https://burnoutassessmenttool.be/wp-content/uploads/2020/08/BAT-English.pdf

Schaufeli, W. B., De Witte, H. & Desart, S. (2020). Burnout assessment tool (BAT)- development, validity and reliability. Environmental Research and Public Health, 17(24): 9495. Retrieved 17 May 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7766078/

Christensen, M. B., Pettersson, T. & Bjallmark, A. (2021). Radiographers' perceptions on task shifting to nurses and assistant nurses within the radiography profession. Radiography. 310-315. Retrieved 4 September 2022 from https://doi.org/10.1016/j.radi.2020.09.002

Cintia de Lima, G., Carlos de Abreu, L., Ramos, J. L. S., Dibai de Castro, C. F., Smiderle, F. R. N., Aldenora dos Santos, J., & Bezerra, I. M. P. (2019). Influence of burnout on patient safety: systematic review and metaanalysis. Medicina (Kaunas), 55(9):553. Retrieved 07 September 2022 from <u>https://doi.org/10.3390%2Fmedicina55090553</u>

Sawyer, K. (2021). 7 Ways to prevent healthcare worker burnout with better scheduling. Deputy USA, online. Retrieved 07 September 2022, from, https://www.deputy.com/blog/prevent-healthcare-worker-burnout



