REVIEW ARTICLE

Occupational Stress: A Descriptive Study among Forensic Professionals

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ABSTRACT

Stress is not an illness, but it can significantly contribute to an individual's health and safety at work if it is not addressed. For decades, forensic science has gone on without devoting sufficient attention to the critical function of human cognition in forensic work. However, forensic scientists face a variety of industry specific pressures, including method criticism, exposure to crime scenes or gruesome case facts on a regular basis, financial resources, working in an adversarial court system, and a zero-tolerance policy for "errors". Thus, stress is an important human factor to mitigate for overall error management, productivity and decision quality (not to mention the well-being of the examiners themselves). According to the researches it has been concluded that forensic experts are facing high level of stress in and during their working hours, which in response hampers the decision making. The present review is undertaken to discuss the level of stress experienced by forensic experts during the course of their field work/Laboratory work.

KEY MESSAGES: This review discusses the stress among forensic professionals. Also, enumerates the on job working compatibilities of decision making and solving the cases in a more effective manner.

KEYWORDS | Forensic experts, Stress, Work place stress, Crime experts, crime scene investigators, forensic decisions, mindfulness, Occupational Stress.

INTRODUCTION

N THE SCIENTIFIC LITERATURE, THE TERM STRESS is employed in an ambiguous and ambiguous and contradictory manner, and it is seldom defined. A stimulus, a reaction to a stimulus, or the physiological repercussions of that response are all examples of the word.¹ There are multiple definitions of stress, especially work-related stress. Job-related stress is defined by the UK Health and Safety Executive (HSE) as "the process that occurs when work demands of various sorts and combinations exceed a person's capacity and competence to cope."² Stress is not an illness, but it can significantly contribute to an individual's health and safety at work if it is not addressed. As a result, businesses in the United Kingdom are required by law to protect the safety and well-being of all employees.²

Stress is defined as an external force that causes tension or strain in a person. Stress is generally viewed as a bad occurrence or scenario that a person is subjected to and resulting in negative repercussions when it occurs in the job.³

Studies have consistently shown that physiological effects of stress on human body plays important role in the functioning. It has significant effect on cardiovascular system,

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Both job-related and individual factors have a role in the development of work burnout. These variables frequently lead to job burnout as a result of persistent job stress. The Job Demands-Resources (JD-R) paradigm states that an employee's well-being is determined by the balance between job demands and job resources, and that high demands/low resources are linked to physiological and/or psychological costs (exhaustion).⁶

Burnout is common in jobs where employees are exposed to stressful and upsetting events and circumstances on a regular basis. Forensic physicians/medical examiners/coroners, like other first responders and law enforcement officers, are frequently exposed to several traumatic occurrences, and their work tasks might be classified as very stressful. Autopsies, dealing with disfigured or decayed remains, and the notion of death are all stressful experiences.⁶

A substantial number of studies have shown the evidence of post traumatic stress disorder or work related stress in forensic experts during their tenure in the field or in the laboratories. Work stress and job satisfaction in criminal justice jobs are associated with physical ailment, turnover, poor job performance, and absenteeism, according to many research.⁷ Understanding the levels and sources of job satisfaction and work stress can help legislators design policies that decrease negative work responses for the benefit of employees, their agency, and the broader public. ⁸

METHODOLOGY

A literature search was conducted across PubMed and Science Direct databases, including the reference lists of relevant articles which ranged in duration of 2010 to 2021. The specific terms used for identifying relevant literatures were "Occupational stress in forensic experts", "Stress level of crime scene investigators", "Work place stress", "forensic decisions", "Judgement factors", "mindfulness", "crime investigators". Reference lists of articles obtained from this search were also examined for additional relevant articles. The inclusion/ exclusion criteria for studies were based on their potential relevance to the high stress level in the forensic experts. Articles published before 2010 were excluded.

DISCUSSION

In 2011 a study done by Hold et al, included 54 certified forensic examiner. This study was to explore levels and sources of job satisfaction and work stress among a sample of digital forensic examiners to improve our knowledge of the complexities and challenges they face in there course of their jobs. There is increasing evidence that digital forensic examiners experience high levels of stress and burnout, particularly due to the investigation of child pornography case. It is not surprising that respondents who experience a large amount of role conflict also report higher work stress. Forensic examiners who have worked for their present agency for a longer period of time face higher job stress since they may be assigned more duties and obligations.

According to Adderley et al (2012) as might have been anticipated for the participants who completed non administrative activities, the results showed that sedentary activity categories produced the lowest mean above resting heart rate, whereas the physical activity category produced the highest mean above resting heart that suggested stress reactivity during routine scene activity such as a crime scene or vehicle examination. The psychosocial stress being felt by crime scene investigator and the stressors are unlikely to be same as those recorded by Anderson et al. (2002)where police officers displayed stress reactivity during , for example having a hand on a holstered gun or during interaction with suspects. This may well apply not only to police officers but also to crime scene investigator engaged in examining what might be perceived to be routine crime scene.

Other variables might contribute to a scene inspection being a source of stress for a crime scene investigator. These include dealing with a hostile victim, working alone, the crime scene investigator's concern that their vehicle may have been vandalised or that they are working in an untidy house, and difficulty determining what might have been touched by the offender, all of which can cause blood pressure to rise during clinical visits or normal daily activities.

Elliott et al, 2012, Concluded that a substantial proportion of Forensic health care professional (FHCP) experienced elevated levels of occupational stress and psychological distress, while moderate levels of burnout were demonstrated in terms of emotional exhaustion, depersonalization, and personal accomplishment. FHCP employed a variety of problem-focused, emotion-focused, and palliative coping methods, according to the findings. Overall, the findings tended to confirm the widely held belief that forensic services is an inherently demanding and hazardous workplace, which can lead to high levels of psychological distress, burnout, and stress among FHCPs.

In 2016, another study was done on crime scene investigators by Leone et al. The research examined the relationship between exposure to critical incidents and the investigators' perceived stress. They concluded crime scene investigators were high in three of the four areas of job related stress. Stress caused by factors internal to the organization included training and access to stress mitigation, stress resulting from factors external to the organization included CSI gender, and many stressors resulted from the job of being a CSI.

Jeanguenat et at (2017) states that human aspects in forensic examinations, job quality, and error control are all developing areas of forensic science. Understanding and controlling human variables may improve a laboratory's quality and technical procedures, as well as its decision-making capacity. Workplace wellness, particularly stress, has been extensively researched across a variety of sectors in order to better understand employee retention, work satisfaction, health, and absenteeism.

Salina et al, (2018), staes that there were no differences in stress and coping mechanisms between sworn officers and civilian crime scene personnel. Male crime scene personnel reported slightly higher levels of stress and anxiety than females, with males also reporting significantly lower use of emotional support, instrumental support, and positive reframing.

According to Kriakaus et al (2019), FHCPs experienced moderate degrees of emotional fatigue and depersonalization, they maintained a good feeling of personal accomplishment and so felt capable and competent in carrying out their responsibilities. Because higher levels of dispositional mindfulness were linked to reduced levels of maladaptive coping, stress, and burnout, MBIs may show to be effective techniques for assisting FHCPs.

Ellickson-Larew et al (2020) concluded that forensic experts seem to be well in the current state of the literature on the dissociative subtype of PTSD, including how different analytic approaches can inform understanding of the diagnostic criteria and how best to assess the subtype in order to assess the potential for malingering and to inform triers of fact about both the presentation of the subtype in the courtroom and the availability of healthcare.

Sehsan et al (2021), did a study on Egyptian forensic physicians using a self-administered questionnaire. It included personal and occupational data, Maslach Burnout Inventory, and the Brief COPE Inventory. Multivariable logistic regression was performed to identify significant independent predictors of burnout. The correlation between burnout and coping was examined. They concluded that burnout is quite common among Egyptian forensic physicians. Female forensic examiners who work in high-stress environments are more prone to experience burnout. As a result, psychoeducation and psychological support services should be implemented and made available to them.

CONCLUSION

Forensic experts have different fields to work on like field based, crime scene, laboratories, and all the back hand work. Their work load

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Conflict of Interest: The authors declare that there is no financial interest. links that could be construed as conflict of interests.

REFERENCES

- 1. Kemeny, M.E., 2003. The psychobiology of stress. Current directions in psychological science, 12(4), pp.124-129.
- Adderley, R., Smith, L.L., Bond, J.W. and Smith, M., 2012. Physiological measurement of crime scene investigator stress. International Journal of Police Science & Management, 14(2), pp.166-176.
- Holt, T.J. and Blevins, K.R., 2011. Examining job stress and satisfaction among digital forensic examiners. Journal of Contemporary Criminal Justice, 27(2), pp.230-250.
- Abdollahi, M.K., 2002. Understanding police stress research. Journal of Forensic Psychology Practice, 2(2), pp.1-24.
- 5. Kumar Sai Sailesh, Srilatha B, 2019. An update on physiological effects of stress. MOJ Anat & Physiol;6(2):45-47.
- Yaribeygi, H., Panahi, Y., Sahraei, H., Johnston, T.P. and Sahebkar, A., 2017. The impact of stress on body function: A review. EXCLI journal, 16, p.1057.

and job requirements can cause stress which can further affect the judgement, decision making and mindfullness in solving cases. Stress management in these individual is very much required to improve the quality of forensic judgements and more importantly health of these experts. Looking at the high level of crime in India, further research on Indian forensic expert population is needed to be done to understand their stress level and job satisfaction.

- Dror, I.E., 2017. Human expert performance in forensic decision making: seven different sources of bias. Australian Journal of Forensic Sciences, 49(5), pp.541-547.
- Ellickson-Larew, S., Escarfulleri, S. and Wolf, E.J., 2020. The dissociative subtype of posttraumatic stress disorder: Forensic considerations and recent controversies. Psychological injury and law, 13(2), pp.178-186.
- Elliott, K.A. and Daley, D., 2013. Stress, coping, and psychological well-being among forensic health care professionals. Legal and Criminological Psychology, 18(2), pp.187-204.
- Jeanguenat, A.M. and Dror, I.E., 2018. Human factors effecting forensic decision making: Workplace stress and well-being. Journal of forensic sciences, 63(1), pp.258-261.
- Salinas, C.R. and Webb, H.E., 2018. Occupational stress and coping mechanisms in crime scene personnel. Occupational Medicine, 68(4), pp.239-245.
- Kriakous, S.A., Elliott, K.A. and Owen, R., 2019. Coping, mindfulness, stress, and burnout among forensic health care professionals. Journal of Forensic Psychology Research and Practice, 19(2), pp.128-146.
- Leone, M.C. and Keel, R., 2016. Occupational stress and the crime scene investigator. Journal of Law and Criminal Justice, 4(1), pp.63-74.
- Sehsah, R., Gaballah, M.H., El-Gilany, A.H. and Albadry, A.A., 2021. Work burnout and coping strategies among Egyptian forensic physicians: a national study. Egyptian Journal of Forensic Sciences, 11(1), pp.1-9.
- Sehsah, R., Gaballah, M.H., El-Gilany, A.H. and Albadry, A.A., 2021. Work burnout and coping strategies among Egyptian forensic physicians: a national study. Egyptian Journal of Forensic Sciences, 11(1), pp. 1-9.