

Developing A Grounded Theory Approach To Stress Management In Forensic Medicine Organizations

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Abstract:

Background: Work-related stress is defined as the detrimental reaction individuals experience in response to excessive pressures and demands arising from their job responsibilities. Occupational stress is an adaptive response to external circumstances that may result in physical, psychological, or behavioral irregularities among the organization's members.

Objectives: Given the unique work environment of forensic medicine organizations, this study aims to establish a stress management model tailored to the specific needs of such institutions.

Methods: This research is rooted in exploratory studies with a fundamental approach. Due to the qualitative nature of this study, a grounded theory strategy was employed. A total of 12 senior managers and experts from the forensic organization, possessing management and scientific records related to value creation, were chosen as participants. All interviews were recorded, transcribed, and analyzed using MAXQDA (version 10), with immediate coding and analysis conducted for each interview.

Results: The research findings were categorized into six main causal categories: background, intervention, context, strategies, and consequences. These categories formed the basis for explaining the stress management model in forensic medicine. In this model, forensic medicine, and the services offered by its units, are considered unique businesses dealing with service provision under exceptional circumstances. The services provided in this context result from a two-way communication process between the forensic staff and the service recipients.

Conclusions: The findings indicate that, as a general guideline, managers within forensic organizations should place a high priority on implementing organizational changes aimed at enhancing working conditions in their operations to effectively manage occupational stress.

KEYWORDS: Occupational Stress, Forensic Medicine, Grounded Theory, Iran.

Introduction

Occupational stress is an inherent aspect of the professional sphere, stemming from job-related experiences. To some extent, it can serve as a motivational force driving individuals to enhance their performance. However, more often than not, it yields adverse consequences. The definition of occupational stress varies across scholars. Sauter et al. define it as the interaction between working conditions and an individual's characteristics, where the demands of the work environment, and the ensuing pressures, exceed the individual's capacity to manage. Hui et al. view occupational stress as an adaptive response to external conditions leading to physical, psychological, or behavioral abnormalities in organizational members. The National Institute of Occupational Health and Safety describes it as a misalignment between job demands and an individual's abilities, skills, and preferences. In simpler terms, occupational stress arises when the expectations placed on an individual in a job do not align with their preferences and desires.



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In accordance with the National Institute of Occupational Safety and Health, occupational stress can be characterized as disruptive emotional responses stemming from the incongruence between job demands and the talents, resources, or preferences of the worker. Although occupational stress and job challenge are often used interchangeably, these two concepts are distinct. Physically and psychologically, challenges stimulate and motivate individuals to acquire new skills within their roles. Confronted with a challenge, people tend to feel at ease and satisfied, rendering challenge a pivotal and constructive factor for both health and productivity. The significance of challenge in people's professional lives is perhaps best encapsulated in the phrase "a little stress is good for you."

Work-related stress is described as an adverse reaction to excessive work-related pressures and demands. In the UK, between 2014 and 2017, occupations related to healthcare delivery exhibited the highest rates of work-related stress-related absenteeism. Furthermore, work-related stress was the most commonly cited reason for healthcare professionals, including nurses, leaving their respective professions. Additionally, compared to employees in other industrial sectors, individuals working in health and social care services, alongside those in protective services like the police, experienced the highest incidence of workplace violence in the UK.

Presently, one of the most stress-inducing fields is healthcare, and previous studies have indicated that stress levels are higher among medical professionals and doctors than in other occupations. Specifically, doctors and forensic medicine personnel face a multitude of stressors owing to the nature of their work, such as:

- A. The significant responsibility borne by forensic doctors in determining the precise cause and timing of deaths or accidents, and the far-reaching implications their findings may have on legal judgments.
- B. Exposure to a stressful environment when dealing with dangerous criminals and prisoners during specialized examinations.
- C. Daily interactions with a large number of individuals who have suffered injuries through various means, including domestic disputes, sexual assault, and bullying, among others.

Employees across different units within forensic organizations grapple with various stress-inducing factors within their work environments, which can detrimentally affect their physical and mental well-being. Given the critical role of forensic organizations in upholding justice and protecting people's rights, occupational stress not only hampers work quality but also proves financially burdensome, considering the substantial investment required to train specialized staff. The physical and mental toll on forensic medical personnel leads to wastage of national resources and, consequently, reduced productivity.

Objectives

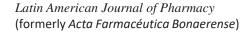
This research aims to introduce a stress management model within the context of a forensic organization, utilizing the grounded theory approach.

Methods

This research employs a qualitative methodology, aligning with the interpretative-constructive paradigm, and utilizes the grounded theory approach. Grounded theory is a systematic method that aims to comprehend individuals' experiences within a particular context. According to Strauss and Corbin, grounded theory involves the systematic derivation of theory from data. The research population for this study comprises experts and managers within the forensic organization, selected through targeted snowball sampling.

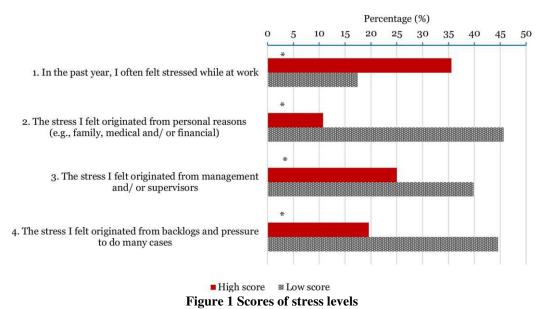
Upon establishing the operational framework and decision-making process, experts were chosen, and they were provided with detailed information regarding the research subject. The main criteria for expert selection included their engagement with the research topic, continuous knowledge in the field for collaboration, motivation to participate in the analysis process, and the perceived value of group consensus information. In this research, an expert is defined as an individual meeting the following criteria: possessing a degree in organizational management, holding at least a master's degree, having a minimum of ten years of work experience in organizational management, and a minimum of five years of experience in forensic management.

The study population also includes managers within the forensic medicine organization. The research employs a two-dimensional sampling approach: purposive sampling in the first stage and theoretical sampling in the second. The number of designated experts in this research is 12. Using the snowball sampling method, interviewees were encouraged to introduce individuals with relevant knowledge about the research topic to continue the interview process. The interviews continued until reaching theoretical saturation.





All conducted interviews were recorded, and the interview text was imported into MAXQDA (version 10). Each interview underwent immediate coding and analysis. Data analysis followed the three-step coding approach of Strauss and Corbin. The first step is open coding, involving the analysis, comparison, naming, conceptualization, and categorization of the data. In the axial coding stage, the focus shifts to establishing connections among the categories generated in the open coding stage. This coding revolves around a central category. After identifying the central category, the data is re-coded to account for various factors affecting the central category, including causal conditions, context, intervention, background, strategies, and consequences. Selective coding is the pivotal stage of theory development, during which the researcher systematically connects the central category to other categories, clarifying their relationships within a narrative framework and enhancing categories as needed.



In general, the findings of the current study can be compared with the results of other studies from two main perspectives. First, the outcomes and the final model derived from this research present a relatively comprehensive and all-encompassing stress management model tailored to the conditions and characteristics of forensic medicine. This model appears to be more fitting and comprehensive compared to models developed by researchers for non-medical contexts. Models designed for various communities, such as students, employees, nurses, or other service and treatment institutions and administrative organizations, are often concise and lack generalizability. Consequently, they may not be suitable as stress management models in the specialized field of forensic medicine.

Second, when compared to other existing models, the model derived in this study demonstrates greater comprehensiveness in terms of the identified dimensions, components, and indicators. This difference becomes evident when examining both domestic and foreign research that, while having certain components and indicators congruent with the current research model, tend to limit themselves in scope. In contrast, the present study has identified and included a number of new components and indicators, reinforcing its strengths. The primary achievement of this research is its comprehensive, indigenous model for stress management, anchored in the specific characteristics of forensic medicine in Iran.

In alignment with the findings of this research, a study by Sharifian et al. identified work roles and responsibilities as the most significant stress factor. Additionally, the research by Taghipour concluded that factors like emotional exhaustion, individual performance, depersonalization, and conflict have a substantial impact on the stress experienced by forensic medical professionals. Furthermore, the current study demonstrates that stress factors differ across various departments within forensic medicine, with the intensity of stress in dissection differing from other departments.

Moreover, personality and family-related factors were identified as key determinants of occupational stress in forensic medicine.



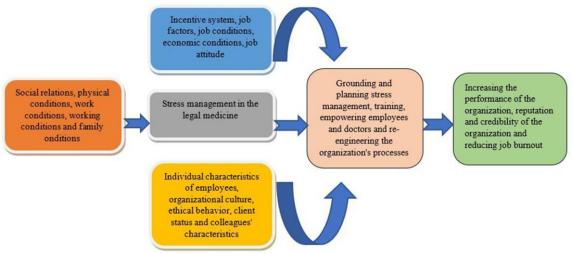


Figure 2 Stress management model in forensic medicine organization

Table 1 Participant Demographics

Demographic and Demographic Subcategories	N
Province	
Tehran	4
Alborz	1
Gilan	1
Khouzestan	1
Esfehan	1
Azarbaijan sharghi	1
Kerman	1
Khorasan razavi	2
Age	
25 - 34	2
35-44	4
45 - 54	6
Years in current position (y)	
1-4	2
5 - 10	3
11-15	5
16 - 20	2

Table 2 Means and Standard Deviations for Ten Questions on Workplace Stress and Support



Questions	M (SD)
1. How often do you feel generally stressed?	3.61 (1.26)
2. How often do you feel stressed at work?	3.85 (1.39)
${\it 3. How often do you feel stressed because of management/supervisors?}$	3.95 (1.47)
4. Do you feel that your management is concerned with your wellbeing?	3.85 (1.81)
5. Do the employees feel good about their managers?	3.98 (1.86)
6. How often do you feel stressed from backlogs and the need to do many cases?	3.43 (1.55)
7. Was the source of stress related to the nature of cases (e.g. murder, rape)?	1.87 (1.11)
8. Was the source of stress related to high-profile cases (i.e., media coverage)?	1.97 (1.31)
9. Was the source of stress related to the circumstances at your work?	2.88 (1.70)
10. Was the source of stress related to personal reasons?	2.70 (1.29)

Table 3 Frequency of Main Concepts of LMO Work Stress

Order	Concepts	Frequency
1	Work environment	55
2	Job status	53
3	Difficulty of work	53
4	clients	50
5	Interpersonal relations	44
6	Ethical behavior in the workplace	41
7	Empowering employees and doctors	39
8	Financial stress	39
9	Grounding and stress management planning	37
10	Workload	34
11	Job rank	31
12	The reputation and credibility of the organization	29
13	Working time	27
14	Communication channels	25
15	Leadership styles	22

Conclusions

Taking into account all the dimensions discussed, including technological, social, political, cultural, and economic developments, it is imperative to view organizational stress management as a dynamic phenomenon adaptable to the global context. Special emphasis should be placed on the cultural and social aspects in the development and perpetuation of this phenomenon.



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In general, strategies for managing occupational stress within the workplace should prioritize organizational changes aimed at enhancing working conditions. Therefore, it is advisable to move away from the traditional perspective that pits work against personal life, creating a competition between the two. Instead, adopting an approach that harmonizes the interests of both the individual and the organization, in parallel with each other, is recommended.

Additionally, based on the research findings, it is suggested to enhance the training provided to administrative personnel, aligning it with their designated responsibilities, and adjusting expectations to avoid overloading them with multiple tasks simultaneously. These steps are considered essential to fostering a healthier work environment and mitigating occupational stress effectively.

To effectively address occupational stress and implement stress management programs, it is vital to approach the employment of individuals in various roles with great care and attention. Leveraging their expertise and professional knowledge becomes crucial in alleviating and resolving stressful issues.

In this regard, organizations should be proactive in taking actions to tackle occupational stress. These actions should be founded on a comprehensive understanding of the specific conditions, factors, and domains related to organizational and operational stress, while considering cultural differences. In essence, to gain control over any phenomenon, organizations must first identify the influencing factors and develop strategies to either mitigate or enhance them.

References

- 1. Bischoff LL, Otto AK, Hold C, Wollesen B. The effect of physical activity interventions on occupational stress for health personnel: A systematic review. Int. J Nurs Stud. 2019; 97:94–104. [PubMed ID: 31234106]. https://doi.org/10.1016/j.ijnurstu.2019.06.002.
- 2. Park S, Jang MK. Associations between Workplace Exercise Interventions and Job Stress Reduction: A Systematic Review. Workplace Health Saf. 2019; 67(12):592–601. [PubMed ID: 31448704]. https://doi.org/10.1177/2165079919864979.
- 3. Alexander Haslam S, Steffens NK, Peters K, Boyce RA, Mallett CJ, Fransen K. A Social Identity Approach to Leadership Development. J Pers Psychol. 2017; 16(3):113–24. https://doi.org/10.1027/1866-5888/a000176.
- 4. McCarthy JM, Trougakos JP, Cheng BH. Are anxious workers less productive workers? It depends on the quality of social exchange. J Appl Psychol. 2016; 101(2):279–91. [PubMed ID: 26375962]. https://doi.org/10.1037/ap10000044.
- 5. Noroozi A, Abdolshah M. [A structural model of affecting factors on job stress with the mediating role of depression (Case Study: The employees of Golestan's gas corporation)]. Iran Occup Health. 2018; 15(2):54–63. Persian.
- Almazrouei MA, Dror IE, Morgan RM. Organizational and Human Factors Affecting Forensic Decision-Making: Workplace Stress and Feedback. J Forensic Sci. 2020; 65(6):1968–77. [PubMed ID: 32841390]. https://doi.org/10.1111/1556-4029.14542.
- 7. Almazrouei MA, Dror IE, Morgan RM. The forensic disclosure model: What should be disclosed to, and by, forensic experts? Int J Law Crime Justice. 2019; 59: 100330. https://doi.org/10.1016/j.ijlcj.2019.05.003.
- 8. Dror IE, Pierce ML. ISO Standards Addressing Issues of Bias and Impartiality in Forensic Work. J Forensic Sci. 2020; 65(3): 800–8. [PubMed ID: 31886896]. https://doi.org/10.1111/1556-4029.14265.
- 9. Shahnavazi H, Sedghi S, Khalesi N. [Evaluation of Individual and Occupational Factors Affecting the Health of Tehran Legal Medicine Administration Employee Based On the Holistic Wellness]. Iran Occup Health. 2018; 15(5):69–77. Persian.
- 10. Agarwal G, Keenan A, Pirrie M, et al. Integrating community paramedicine with primary health care: a qualitative study of community paramedic views. Canadian Medical Association Open Access Journal 2022; 10: E331–E337
- 11. Shannon B, Eaton G, Lanos C, et al. The development of community paramedicine; a restricted review. Health Soc Care Community. 2022; 30(6): e3547–e3561.
- 12. Barry T, Batt A, Agarwal G, et al. Potential for Paramedic roles in Irish General Practice: a qualitative study of stakeholder's perspectives. HRB Open Research 2022; 5: 40.
- 13. Paramedic Network. Community Paramedicine, https://paramedicnetwork.org/community-paramedicine/ (2022).



Latin American Journal of Pharmacy (formerly Acta Farmacéutica Bonaerense)

Lat. Am. J. Pharm. 42 (10): (2023)

14. International Board of Specialty Certification. Community Paramedic certification (CP-C), https://www.ibscertifications. org/roles/community-paramedic (2022).