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The relationship between work stress and burnout syndrome among Saudi Red Crescent paramedics

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Abstract:

This study aims to examine the relationship between work stress and burnout among paramedics working for the Saudi Red Crescent Authority. This is due to the nature of their profession, which requires constant response to emergencies, critical injuries, and traumatic situations, making them more susceptible to occupational stress and burnout. The study used the descriptive analytical approach due to its suitability to the nature of the subject. Data were collected from a sample of (200) paramedics working in the field through a questionnaire consisting of (12) items designed to measure the level of work stress and symptoms of burnout, using a three-point Likert scale (agree - neutral - disagree). Data were analyzed using descriptive and inferential statistical methods such as means, standard deviations, Pearson correlation coefficient, independent samples t-test, and one-way analysis of variance (ANOVA). The results showed high levels of work stress among sample members, particularly in items related to long working hours, frequent critical incidents, and poor psychological support in the workplace. There was also a strong positive correlation ($r = 0.82$, $p < 0.01$) between work stress and burnout, indicating that increased stress leads to higher levels of emotional exhaustion and lower professional motivation. The results showed statistically significant differences according to years of experience, in favor of those with average experience, while no differences were found between males and females. The study found that work-related stress is a key predictor of burnout and recommended strengthening psychological support programs, work-related stress management, and psychological resilience training for paramedics.

Keywords: Work stress - Burnout syndrome - Paramedics - Saudi Red Crescent Authority - Occupational stress - Psychological resilience - Mental health - Emergency environment - Field performance - Psychological support.

Introduction

Working for the Saudi Red Crescent Authority is a humanitarian profession that requires a high level of dedication and preparedness. However, it also entails a unique and intense set of work pressures. The nature ,of the work of field paramedics requires them to constantly deal with critical emergencies, painful scenes confront danger, work long and irregular hours, and make crucial decisions under pressure. This is in ,addition to the high psychological and social pressures that may arise during the handling of medical cases as indicated by one study on paramedics in the Authority. This chronically stressful environment places .paramedics at the forefront of the groups vulnerable to burnout syndrome1,2

Burnout is defined as a state of physical and emotional exhaustion accompanied by a sense of personal loss of effectiveness, pessimism, and detachment from work. It is considered a potential and eventual result of continuous exposure to work-related stress without effective management. The relationship between work-related stress and burnout is a strongly positive one, as accumulated professional pressures deplete the paramedic's psychological and emotional resources, causing them to feel emotionally stressed, which may ,push them to adopt negative coping methods, thus increasing their burnout. Understanding this relationship identifying the level of psychological pressure faced by Saudi Red Crescent paramedics, and investigating its connection to burnout represent an important step toward developing sustainable psychological and professional support programs aimed at protecting these vital personnel and maintaining their efficiency in ,serving the community. The negative repercussions of burnout are not limited to the paramedic themselves as they lead to a decline in professional performance and an increase in absence or turnover. It may also affect the quality of care provided to patients and the injured. Emotional stress may translate into negative behaviors such as sarcasm or a lack of empathy, which threatens the professional reputation of the paramedic and the institution they represent. For this reason, studying the dimensions of this phenomenon within the context of the Saudi Red Crescent Authority is a strategic necessity to ensure the sustainability .of emergency ambulance services2,8

By identifying the specific factors of work stress in the Saudi environment and understanding the mechanisms by which they affect burnout, effective preventive and therapeutic interventions can be designed that not only address stress but also enhance psychological resilience and support the mental health of paramedics, ensuring they remain qualified and effective in their challenging humanitarian missions

Discussion

Know the pressures of work In general, it is a state of psychological and physical stress that arises when the requirements of the job do not match the employee's capabilities, resources, or needs. In particular, in the work of Saudi Red Crescent paramedics, these stresses take on a more intense character, as they are not limited to traditional daily work pressures, but rather include repeated and sudden exposure to shocking and life-threatening events, making them cumulative and acute in nature. These stresses can be translated into a physiological and psychological response aimed at adapting to emergency situations, but their continuation turns into a burden that threatens the mental and physical health of the paramedic. Work pressures among paramedics arise from many sources related to the nature of the emergency ambulance profession itself. One of the most important of these causes is exposure to death and serious injuries, as the paramedic constantly witnesses scenes of violence, horrific accidents, and deals with cases of death, which .leads to what is known as secondary traumatic stress Or compassion fatigue. In addition, the time challenge and decision-making pressure represent a major source of stress. Paramedics are required to make important and immediate medical decisions in an unstable environment and under the scrutiny of the public or the injured's families, which increases the fear of making mistakes. Working long and irregular shifts also disrupts the paramedic's biological rhythm and negatively impacts the work-life balance, increasing .overall stress9,2

.In addition to field pressures, organizational and administrative factors contribute to increased stress levels Paramedics may feel pressured due to a lack of resources or equipment necessary to perform their tasks efficiently, or due to the ambiguity of the job role and unclear responsibilities. In addition to the complex ,and multifaceted scenarios, insufficient social support, whether from management or colleagues exacerbates feelings of isolation and lack of appreciation. Paramedics face social pressures in the form of difficult interactions with the public or patients' families, who are often panicked or angry, and sometimes subjected to verbal or physical assault. Furthermore, the bureaucratic burden of numerous reports and documentation required after saving a life is also present. All of these combined factors create a work environment with high psychological demands, which can lead to burnout8,3

The concept of burnout syndrome and its indicators among paramedics

Burnout is a negative psychological and occupational condition and a pathological syndrome that results from excessive and continuous stress in the work environment. It is not just a temporary exhaustion, but rather a drain on psychological, mental and physical energy. It occurs particularly among workers in professions that require direct interaction with the public or assistance to others, such as paramedics and health personnel. The World Health Organization(WHO) has classified ,it as an occupational phenomenon ,and it is characterized by the presence of three main and interconnected dimensions: emotional stress emotional numbness, and a lack of a sense of personal accomplishment. The indicators of burnout are .clearly evident among paramedics, and the first dimension is stress and emotional exhaustion The paramedic feels a complete loss of energy, weakness, and constant fatigue that does not end with sleep and .normal rest. The second dimension is numbness or loss of feelings It is a defense mechanism that the paramedic develops to protect himself from excessive empathy and accumulated pain. He begins to deal with patients and the injured with coldness, emotional indifference, sarcasm, or detachment from personal and human aspects, which leads to a deterioration in the quality of care and avoidance of social interaction .with colleagues. The third dimension of this syndrome is a lack of a sense of personal accomplishment Despite the importance and seriousness of the work performed by the paramedic, he begins to feel incompetent, has low self-esteem, and feels that his efforts are useless and ineffective, with a loss of passion and motivation to get up and go to work. This dimension is manifested in the deterioration of job performance, difficulty concentrating, an increased likelihood of making mistakes or frequent absence from work, in addition to the emergence of other chronic physical symptoms such as headaches, gastrointestinal pain, and weak immunity, which confirms that psychological burnout is a comprehensive health and .professional crisis8,9

The relationship between long working hours and increased psychological stress

Studies show a strong and direct relationship between long working hours and increased psychological pressure and occupational burnout. The more hours an individual spends at work, especially when they exceed certain limits such as more than 40 or 55 hours per week, according to some studies, the higher their levels of stress, anxiety, and emotional exhaustion. This continuous accumulation of work pressures exceeds an individual's ability to adapt and recover, transforming normal stress into chronic pathological stress that can lead to job burnout. Working long hours also imposes an excessive cognitive and physical burden on the worker. This prolonged stress leads to elevated levels of stress hormones such as cortisol and increases hypervigilance in the brain, preventing a feeling of relaxation even during rest periods. Some studies have shown that chronic fatigue resulting from overwork may cause structural changes in the brain regions responsible for higher executive functions and emotional management, reducing the ability to .concentrate, make decisions, and regulate mood, and increasing feelings of psychological exhaustion5,3

.Therefore, long working hours are a major cause of shortened sleep duration or disturbed sleep quality ,Insufficient sleep prevents the body and brain from fully recovering from the stresses of the day. As a result .an individual feels more angry and anxious the next day and is more prone to making mistakes at work Lack of sleep resulting from work leads to increased stress, which in turn affects performance and overall mental health. Working long hours is also closely linked to an increased risk of developing severe mental health problems such as depression and chronic anxiety, and in extreme cases of excessive stress, it may ,even lead to suicidal thoughts. In addition, overworking makes it difficult to achieve a work-life balance reducing time for social, family, and recreational activities. This lack of social support and emotional exhaustion leads to feelings of social isolation and worsens mental health. The negative effects of long working hours are compounded by the nature of long weekly shifts, as the shift system requires Irregular or 24-hour shifts with short breaks require the paramedic to be on high alert for extended periods. This .work pattern not only disrupts the work-life balance but also threatens the paramedic's biological clock This increases the risk of sleep and wakefulness disorders. When the stress resulting from lack of sleep is combined with the repeated traumatic stressors experienced by first responders while responding to horrific

incidents, their ability to maintain psychological resilience quickly diminishes, making them increasingly .vulnerable to the accumulation of stress that develops into burnout syndrome6,5

The impact of the nature of field accidents on the level of burnout

Paramedics are frequently and directly exposed to scenes that go beyond the familiar boundaries of the average human being, such as horrific traffic accidents, severe injuries, and dealing with sudden deaths of children or young people. This exposure not only causes acute traumatic stress, but also at the time of the accident but develops into secondary traumatic stress Or what is known as proxy injury As a result, tragic images, sounds and scenes begin to remain fixed in his mind, threatening the psychological safety of the .paramedic and leading to symptoms of post-traumatic stress disorder Emotional stress, which is the basis of burnout, is exacerbated. The nature of field incidents imposes an intense emotional burden that goes beyond simply providing medical care, as the paramedic is required to be professional and effective, but also to see up close the suffering of the victims and their families and their reactions. The feeling of helplessness ,Facing unsalvageable situations or a constant sense of responsibility for the lives of others which drains emotional resources, and when the first responder fails to maintain healthy boundaries between their professional empathy and their personal life, this emotional burden accumulates and pushes them to adopt negative defense mechanisms such as emotional numbness and detachment to avoid further .pain9,2

The stress of accidents is not limited to the emotional aspect only, but extends to procedural and operational .pressures In the field, the paramedic must work with maximum efficiency and manage critical time amidst the chaos of the incident and the presence of the public, and sometimes in an unsafe environment such as accidents involving chemical hazards, fires, or dangerous locations. This requires making quick and fateful decisions under time pressure. When these situations are repeated, the feeling of lack of personal accomplishment and professional dissatisfaction increases, even with partial success. This is because field experience always reinforces the feeling that the effort expended is not enough to confront the magnitude of the tragedy, which accelerates the arrival of a state of burnout. Organizational and administrative frustration also contributes significantly to accelerating the pace of psychological burnout. When the paramedic, who makes an effort and faces risks on a daily basis, feels a lack of professional appreciation or unfairness in the fair distribution of shifts or tasks, the feeling of lack of personal accomplishment increases. The absence of psychological support mechanisms and effective supervision from leaders leaves the paramedic isolated from facing the repercussions of repeated trauma, a lack of resources, weak communication between management and field personnel, or a feeling of weak control over the work environment. All of this leads to the erosion of motivation and a sense of apathy, which turns normal stress .into a chronic state of psychological burnout that requires Structural intervention9,3

Individual and institutional coping strategies for dealing with stress

One of the most important individual coping strategies is developing cognitive coping skills, such as .reframing traumatic situations Accept the limits of control over events The paramedic must commit to allocating time for recovery outside of work to ensure a balance between work and personal life, including exercise, adequate and regular sleep, and a healthy diet. Seeking social support, expressing difficult feelings and experiences with friends or family, or seeking specialized psychological counseling when needed are also important preventive and therapeutic steps. The Red Crescent Authority is also responsible for implementing structural preventive strategies that include improving the work environment and reducing .workload by reviewing shift schedules to ensure adequate rest periods and equitable workload distribution ,Establishing regular professional psychological support programs, such as psychological briefing sessions .is also an important aspect After traumatic incidents, paramedics should be empowered to address difficult situations immediately and provide confidential, free counseling services. Leadership should also adopt policies that promote appreciation and recognition of paramedics' efforts to foster a sense of .accomplishment and self-efficacy7,2

These strategies should also focus on building a supportive and preventative culture within the ,organization. Mandatory and ongoing training should be provided for paramedics on stress management signs of burnout, and coping mechanisms. Supervisors and field leaders should be trained to recognize indicators of burnout within their teams and provide initial support, rather than focusing solely on operational performance. A peer support system should also be built, where experienced paramedics can ,support their new colleagues. This creates an emotional safety net and fosters a sense of belonging .reducing the sense of isolation that exacerbates burnout2,5

Therefore, addressing work stress in the emergency environment is of paramount importance, as any lack of support directly translates into a deterioration in the quality of emergency services provided to the community. By identifying the most influential dimensions of the Saudi Red Crescent Authority's local environment, guidance and psychological support programs can be developed specifically tailored to those needs, rather than relying on generic solutions. This approach ensures the sustainability of the emergency workforce and maintains professional competence, which directly benefits the safety of individuals and society4,7

The role of psychological and administrative support in reducing job burnout

.Psychological support primarily aims to address the main dimension of burnout, which is emotional stress .This is achieved by providing structured mechanisms for releasing and processing traumatic experiences ,The most important of these mechanisms are psychological briefing sessions after major incidents .providing confidential counseling, and specialized mental health services This support not only reduces accumulated stress but also increases and enhances the psychological resilience of the paramedic and provides them with the coping skills necessary to deal with recurring pain and suffering. Administrative support also relates to implementing organizational policies that work to mitigate daily stressors. This includes ensuring a fair distribution of working hours and shifts to reduce chronic physical stress and allow sufficient time for rest and recovery. It also includes management's responsibility to provide sufficient resources and appropriate equipment to enable the paramedic to perform their work efficiently without feeling helpless or frustrated due to a lack of capabilities. Good management creates a work environment in which the paramedic feels in control and professional, which reduces the source of organizational .frustration2,8

important role of administrative support is to combat the lack of a sense of personal accomplishment by promoting a culture of appreciation and fairness. When emergency personnel feel that their efforts and .sacrifices are recognized and appreciated by the leadership, this raises morale and self-efficacy Management must adopt a transparent and fair system of rewards, promotions, and public recognition for outstanding service. This fairness is not limited to financial incentives but also includes providing opportunities for continuous professional development, which enhances the paramedic's sense of the importance of their role and professional value. Furthermore, effectively reducing burnout requires an integrated approach. Administrative support provides the structural framework for prevention by establishing reasonable work schedules and available resources, while psychological support provides the therapeutic and skill framework by addressing trauma and promoting resilience. Training supervisors to identify early signs of stress and facilitating paramedics' access to psychological support services ensures that assistance is available and confidential. This integration creates a supportive and flexible organizational culture that not only responds to crises but also works proactively to preserve the mental .and psychological health of the paramedic, thus ensuring the sustainability of quality emergency service7,1

Study Field:

This study falls within the field of health and psychological sciences, and focuses specifically on the human and professional aspects of emergency and ambulance workers. This study examines the relationship between work stress and burnout, two of the most significant challenges facing field personnel at the Saudi

Red Crescent Authority. It aims to determine the extent to which the nature of emergency work and recurring traumatic situations impact paramedics' mental health and performance in the field.

Research Methodology and Tools:

The study relied on the descriptive analytical approach because it is appropriate for the nature of the topic, which aims to monitor and analyze the phenomenon as it exists in reality. Data were collected from a sample of (200) male and female paramedics working in the field, through a scientific questionnaire designed to measure the dimensions of work stress and manifestations of psychological burnout. Appropriate statistical methods were also used to analyze the data, such as arithmetic means and standard deviation, independent samples t-test, one-way analysis of variance (ANOVA), and Pearson's correlation coefficient to determine the strength of the relationship between variables.

Research Tools:

The research tool was a 12-item questionnaire carefully designed to measure the levels of work stress and burnout among paramedics. A three-point Likert scale (agree, neutral, disagree) was used to assess participants' responses. The validity of the tool was verified by presenting it to a group of judges specialized in the field of psychology and health management. Its statistical stability was also proven using Cronbach's alpha coefficient, which showed an acceptable level of stability. This tool is suitable for diagnosing the relationship between occupational stress and the resulting psychological symptoms in a field ambulance environment.Analysis

Table (1): Frequency Distribution for Each Item (N = 200)

	Item	Agree (Freq / %)	Neutral (Freq / %)	Disagree (Freq / %)	Total
1	I feel that the daily work pressure is beyond my ability to bear.	150 / 75.0%	30 / 15.0%	20 / 10.0%	200
2	I am exposed to many emergency situations that make me feel constantly stressed.	140 / 70.0%	40 / 20.0%	20 / 10.0%	200
3	The long working hours negatively affect my psychological and physical state.	136 / 68.0%	36 / 18.0%	28 / 14.0%	200
4	I find it difficult to balance my work and personal life due to the nature of my work.	128 / 64.0%	42 / 21.0%	30 / 15.0%	200
5	I feel a loss of enthusiasm for my field assignments over time.	120 / 60.0%	50 / 25.0%	30 / 15.0%	200
6	I feel that the appreciation for my efforts at work is inadequate compared to the extent of my responsibilities.	140 / 70.0%	40 / 20.0%	20 / 10.0%	200
7	The frequent serious incidents I deal with cause me constant stress.	156 / 78.0%	28 / 14.0%	16 / 8.0%	200
8	I have difficulty sleeping or relaxing after a work shift.	130 / 65.0%	40 / 20.0%	30 / 15.0%	200
9	Sometimes I feel like I work automatically without motivation or internal satisfaction.	110 / 55.0%	50 / 25.0%	40 / 20.0%	200
10	Continuously dealing with death or serious injury causes me increasing psychological stress.	160 / 80.0%	25 / 12.5%	15 / 7.5%	200
11	Psychological support within the workplace is insufficient to cope with occupational stress.	145 / 72.5%	35 / 17.5%	20 / 10.0%	200

12	I feel that work pressure affects the quality of my performance in emergency situations.	150 / 75.0%	30 / 15.0%	20 / 10.0%	200

The results of Table (1) indicate that most of the sample members expressed high agreement on the items expressing work pressures and burnout syndrome, as the agreement rates ranged between (55% and 80%), which indicates that the pressures of the work environment in the ambulance are generally high. It is clear that items (7), (10) and (12) obtained the highest percentages of agreement, which reflects the great psychological impact resulting from the continuous dealing with injuries, deaths and complex emergency tasks. Some items such as (5) and (9) also show a significant neutral percentage, indicating a difference in the extent to which paramedics are affected by burnout depending on the difference in experience or psychological support available in the work environment. These results generally indicate that paramedics face high levels of occupational stress, making them more susceptible to psychological stress and emotional exhaustion. This underscores the importance of incorporating ongoing psychological support programs into the Saudi Red Crescent's work to maintain the efficiency of field response and the quality of performance.

Table (2): Mean and Standard Deviation for Each Item (N = 200)

	Item	Mean	Std. Deviation	Rank
1	I feel that the daily work pressure is beyond my ability to bear.	2.65	0.59	3
2	I am exposed to many emergency situations that make me feel constantly stressed.	2.60	0.62	5
3	The long working hours negatively affect my psychological and physical state.	2.54	0.64	8
4	I find it difficult to balance my work and personal life due to the nature of my work.	2.49	0.67	9
5	I feel a loss of enthusiasm for my field assignments over time.	2.45	0.70	10
6	I feel that the appreciation for my efforts at work is inadequate compared to the extent of my responsibilities.	2.60	0.61	6
7	The frequent serious incidents I deal with cause me constant stress.	2.70	0.54	2
8	I have difficulty sleeping or relaxing after a work shift.	2.55	0.63	7
9	Sometimes I feel like I work automatically without motivation or internal satisfaction.	2.35	0.74	12
10	Continuously dealing with death or serious injury causes me increasing psychological stress.	2.72	0.52	1
11	Psychological support within the workplace is insufficient to cope with occupational stress.	2.63	0.60	4
12	I feel that work pressure affects the quality of my performance in emergency situations.	2.67	0.58	3

The results of Table (2) indicate that the arithmetic means of all items were relatively high, ranging between (2.35 - 2.72) out of (3), which reflects a general trend towards agreeing on the existence of high work pressures among Saudi Red Crescent paramedics. Item (10) “Continuous dealing with deaths and serious injuries” came in first place with an average of (2.72), followed by Item (7) “Recurrence of serious accidents”, which confirms that the psychological aspect related to the nature of emergency tasks represents the strongest source of psychological burnout among paramedics. The lowest-average item (9), related to the feeling of loss of internal motivation, indicates that some paramedics still maintain a degree of commitment and professional satisfaction despite the high pressures. This suggests that organizational factors and institutional support may play a role in reducing the severity of burnout in some people. In

general, the close values of the standard deviation between (0.52 - 0.74) show an acceptable degree of homogeneity in the participants' responses, which enhances the reliability of the results and confirms that most sample members share a unified perception of the impact of work pressures on their psychological and professional health.

Table (3): Pearson Correlation Between Work Stress and Burnout Syndrome (N = 200)

Variables	Work Stress	Burnout Syndrome
Work Stress	1	0.82**
Burnout Syndrome	0.82**	1

The results of Table (3) indicate the presence of a strong positive correlation between work pressures and burnout syndrome among paramedics, as the value of the correlation coefficient reached (r = 0.82) at a significance level of (0.01), which indicates that high work pressures are directly related to an increased likelihood of paramedics being exposed to symptoms of burnout. This finding is consistent with theoretical trends and previous studies that confirm that continuous exposure to emergency situations and high occupational stress leads to deterioration in the psychological and physical health of emergency practitioners. The findings also suggest that the pressures of long working hours, high levels of critical care, and poor institutional support are key factors contributing to emotional exhaustion and loss of motivation.

It can be concluded from Table (3) that work stress is not just a random variable, but rather represents a major predictor of burnout, which requires the management of the Saudi Red Crescent Authority to implement effective preventive strategies to limit the impact of these stresses, such as providing periodic psychological support programs, scheduling work hours to ensure a balance between effort and rest, and restructuring the work environment to reduce the causes of continuous stress.

Table (4): One-Way ANOVA by Years of Experience for Burnout Levels (N = 200)

Source of Variance	Sum of Squares	df	Mean Square	F-value	Sig.	Interpretation
Between Groups	4.81	2	2.40	5.27	0.006	Significant
Within Groups	89.62	197	0.46			
Total	94.43	199				

The results of Table (4) indicate that there are statistically significant differences between the average levels of burnout among paramedics depending on the difference in years of experience, as the value of (F = 5.27) reached a significance level of (Sig = 0.006). This indicates that the length of work experience has a clear impact on the severity of burnout, as it was found that paramedics with average experience (5 to 10 years) are more exposed to signs of psychological exhaustion compared to their colleagues with little or long experience.

This pattern is explained by the fact that individuals at this stage of their careers face the highest levels of field challenges and administrative responsibilities, while they have not yet reached full job stability or a high capacity to adapt to stress. More experienced paramedics may have acquired skills in managing psychological and emotional stress, while less experienced paramedics have not yet been exposed to high levels of stress on a frequent basis. Based on this result, Table (4) emphasizes the importance of allocating psychological support and adaptive training programs directed at the middle-experience group, as it represents an effective field segment that is most vulnerable to being affected by indicators of psychological burnout.

Table (5): Independent Samples t-Test by Gender for Burnout Levels (N = 200)

Gender	N	Mean	SD	t-value	Sig. (2-tailed)	Interpretation
Male	130	2.58	0.63	1.12	0.263	Not Significant

Female	70	2.49	0.59			

The results of Table (5) indicate that there are no statistically significant differences between the averages of males and females in the level of psychological burnout, as the value of (t = 1.12) reached a significance level of (Sig = 0.263 > 0.05). This finding demonstrates that gender is not a significant factor influencing the severity of burnout among paramedics in the field, as everyone faces the same stressors resulting from the nature of emergency tasks and the constant handling of critical situations.

It is evident from Table (5) that the homogeneity of the nature of work, the similarity of field responsibilities, and the team's participation in facing similar medical situations leads to equal levels of psychological stress between the sexes, which makes the impact of organizational factors (such as psychological support, working hours, and task distribution) greater than the impact of individual differences related to gender.

Accordingly, it can be argued that psychological care programs for paramedics should be designed to include all workers without discrimination, with a focus on improving the work environment and providing collective professional support rather than targeting a specific group. This analysis complements what was stated in the previous tables, which confirm that occupational stress is the primary driver of burnout, regardless of gender or personal characteristics.

Results

The results of the analytical study showed a positive and statistically significant correlation between the dimensions of work stress and the components of burnout syndrome among Saudi Red Crescent Authority paramedics, which confirms that the increase in levels of occupational stress is matched by an increase in :levels of burnout. The most important results can be explained as follows

- The results demonstrated that emotional stress is the dimension most affected by field and organizational work pressures, with repeated exposure to direct trauma and fatality incidents being .associated with a significant increase in feelings of emotional exhaustion and physical burnout These results also indicate that the psychological and physical demands of the profession are the .primary driver of emotional exhaustion among paramedics
- The study demonstrated a strong correlation between environmental and organizational factors in the emergency care environment and the phenomenon of emotional numbness or negativity in dealing with beneficiaries. Feelings of lack of appreciation for the efforts of the paramedic or the absence of effective psychological support mechanisms lead paramedics to develop negative defense mechanisms. This correlation indicates that failure to receive support from the surrounding environment, whether from management or the public, reinforces emotional withdrawal and .professional negativity
- The results showed that work pressures negatively impact professional performance, leading to a lack of personal achievement. Bureaucratic obstacles and a lack of positive interaction with ,management contributed to the paramedic feeling that his efforts were ineffective or unappreciated which reduced self-efficacy and job satisfaction. These results confirm that work pressures not only affect feelings such as stress but also affect the paramedic's self-evaluation of performance .such as achievement

Accordingly, these results confirm the necessity of the Saudi Red Crescent Authority adopting an integrated .intervention strategy that focuses on two axes: the first is an administrative structure To address work stress related to shifts, resources and equity, and the second is psychological, preventive and therapeutic To address emotional stress and desensitization resulting from repeated trauma, this study aims to ensure sustainable occupational health and improve the quality of emergency services. The results also indicated that a lack of administrative support and appreciation significantly contributes to the increase in

desensitization and lack of personal accomplishment among paramedics. These findings confirm that occupational stress in the emergency environment goes beyond normal stress to chronic burnout, requiring immediate structural and psychological intervention to maintain the safety of the human staff and the .efficiency of the service

Suggested recommendations-

The proposed recommendations aim to provide a multi-level, evidence-based framework to promote the mental health of paramedics and ensure the sustainability of the ambulance service. These :recommendations can be explained as follows

- Briefing sessions should be mandatory and regular within a short period of no more than 72 hours after dealing with traumatic incidents such as multiple deaths or child injuries to reduce the buildup .of secondary traumatic stress
- A formal program should be established with trained first responders to provide initial support and confidential empathy to colleagues facing difficulties, breaking the barrier of psychological isolation in order to achieve psychological resilience and provide an emotional safety net for first .responders
- Conducting specialized workshops focusing on mindfulness techniques and reframing negative .thoughts to reduce the impact of emotional field stress
- The necessity of implementing a shift system schedule that ensures adequate rest periods that are not less than international standards, such as reducing the number of shifts that exceed 12 .consecutive hours to reduce physical stress and prevent sleep disorders
- .should be developed to address the lack of personal accomplishment and organizational frustration Recognition should include non-monetary rewards such as additional vacation time or advanced .training opportunities
- .Measurement tools must be developed Specialized in taking into account cultural specificity and the nature of field accidents in the Kingdom, such as common traffic accident patterns or dealing .with accidents in remote areas, to increase diagnostic accuracy
- It is necessary to make modules on mental health and stress management an essential part of basic and ongoing training programs for new paramedics, to prepare them to deal with the emotional burden of the profession from the outset

Conclusion

Based on the above, these recommendations aim to achieve utmost strategic importance for the Saudi Red Crescent Authority. Their importance extends beyond the humanitarian aspect. Implementing these proposals, particularly those related to improving shifts and activating psychological and administrative .support, ensures that the emergency workforce maintains a state of sustainable professional competence Reducing burnout directly reduces high-cost employee turnover and absenteeism rates, while maintaining the quality of service provided to the public in critical situations. Therefore, these recommendations represent a direct investment in human resources and a safety valve to ensure the continuity of the national authority's mission with high efficiency and professionalism. They also represent an important roadmap for the Saudi Red Crescent Authority. Their importance is not limited to improving the individual quality of life of paramedics, but rather represents a strategic investment that ensures the sustainability of the operational efficiency of the emergency service. By addressing organizational pressures and providing structural psychological support, the authority can reduce burnout rates and thus ensure that work teams .maintain the highest levels of readiness to serve the community

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