

A Study on Stress Management of Ambulance Drivers

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Abstract-- This study explores the physical, mental, emotional, and financial impacts of work-related stress on ambulance drivers, along with the coping strategies they commonly use to manage stress. A descriptive research design was employed, involving a sample of 150 ambulance drivers from government, private, and hospital ambulance services in the selected area. Data were collected through structured questionnaires and analyzed using percentage analysis, ranking methods, means, tables, and charts.

Results reveal significant physical impacts of stress, including disturbed sleep, altered eating habits, and physical exhaustion, with eating habits being the most affected. Mental impacts such as anxiety during emergency situations and overthinking work-related incidents are moderately prevalent, though opinions on mental exhaustion and overall mental health effects were mixed. Emotionally, ambulance drivers reported moderate levels of emotional exhaustion, distress from witnessing serious cases, and feelings of sadness or depression, though emotional detachment from family was less common.

Coping strategies largely involve emotional support from family, friends, and colleagues, with social media and music also used frequently. Physical coping strategies primarily include getting adequate sleep, maintaining healthy eating habits, and taking breaks during shifts. Less commonly practiced are professional counseling, regular exercise, and relaxation techniques.

The findings highlight the multi-dimensional impact of occupational stress on ambulance drivers and underscore the need for targeted interventions to promote their well-being through effective coping mechanisms.

Keywords-- Stress Management, Ambulance Drivers, Mental Impact, Emotional Impact, Physical Impact

I. INTRODUCTION

Emergency medical services (EMS) play a critical role in saving lives and providing urgent care in medical emergencies. Among the frontline workers in EMS, ambulance drivers hold a particularly vital position. They are responsible not only for transporting patients safely to medical facilities but also for managing time-sensitive situations where every second counts. This responsibility, however, comes with unique challenges that can significantly affect their physical, mental, and emotional well-being. One of the most common issues faced by ambulance drivers is stress. Stress is a natural response to challenging situations.

In small amounts, it can motivate individuals to perform better and remain alert in critical circumstances. However, chronic or excessive stress can have severe consequences. For ambulance drivers, stress may result from factors such as traffic hazards, exposure to traumatic events, life-or-death decision-making, long working hours, and demanding shifts. Over time, continuous exposure to these stressors can lead to burnout, decreased job performance, fatigue, and even serious health problems, such as cardiovascular issues or mental health disorders. Therefore, understanding and managing stress in this group is not only important for their well-being but also for the safety and effectiveness of emergency medical services. The nature of an ambulance driver's work is inherently stressful. Every day, they face high-pressure situations that require immediate attention and rapid decisionmaking. They may encounter severe injuries, accidents, or patients in critical conditions. These events can have emotional impacts, especially if the driver feels responsible for the patient's well-being or witnesses traumatic incidents. Moreover, ambulance drivers often work in environments that are unpredictable and sometimes dangerous, navigating through heavy traffic, adverse weather, or unsafe areas. The combination of these factors makes ambulance drivers highly vulnerable to stress compared to many other professions. Effective stress management is therefore essential to maintain the health and performance of ambulance drivers. Stress management involves recognizing the signs of stress, understanding its sources, and implementing strategies to reduce or cope with it. Strategies may include physical activities, relaxation techniques, proper work scheduling, psychological support, training in coping mechanisms, and organizational policies that promote a supportive work environment. Studies have shown that implementing structured stress management programs can lead to better mental health, increased job satisfaction, and improved overall performance among healthcare workers, including ambulance drivers. Understanding stress in ambulance drivers is also important for the broader healthcare system. Stressed or fatigued drivers may face slower reaction times, impaired judgment, or decreased attention, which can affect patient care and safety. Furthermore, unmanaged stress can lead to higher absenteeism, turnover, and healthcare costs.



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By focusing on stress management, organizations can create a healthier, more resilient workforce that provides better services to patients while protecting the well-being of their employees. This study aims to explore the causes and effects of stress among ambulance drivers and identify practical strategies for stress management. It seeks to highlight the importance of providing support systems, training, and resources to help these professionals cope with their demanding work environment. The findings of this study are intended to inform policymakers, healthcare organizations, and emergency medical services about the significance of stress management interventions and their potential benefits for both employees and patients.

II. REVIEW OF LITERATURE

[World Health Organization (2019)] emphasized that emergency healthcare workers are exposed to continuous occupational stress due to unpredictable working conditions, long duty hours, and frequent exposure to trauma. The report highlights that unmanaged stress can lead to burnout, anxiety, and physical illness, stressing the need for structured stress management systems in emergency services. [International Labour Organization (2016)] identified workplace stress as a global occupational health issue. It stated that shift work, job insecurity, and heavy workload are major stressors in transport and emergency sectors. The organization recommended policy interventions and better working conditions to reduce stress. [Sterud et al. (2011)] study found that ambulance personnel experience higher psychological distress compared to many other professions. Emotional exhaustion and exposure to traumatic incidents were identified as key contributors to stress. Petrie et al. (2018)] study revealed a high prevalence of Post-Traumatic Stress Disorder (PTSD) and burnout among EMS workers. Repeated exposure to emergencies without adequate recovery time increased mental health risks. [Halpern et al. (2009)] reported that repeated exposure to critical incidents significantly affects paramedics and ambulance drivers, leading to emotional fatigue and intrusive memories. [Regehr & Millar (2007)] research showed that ambulance workers often suppress emotional responses during emergencies, which later contributes to long-term psychological strain.

[Maslach & Jackson (1981)] introduced the burnout theory, identifying emotional exhaustion, depersonalization, and reduced personal accomplishment as key dimensions of occupational stress, highly relevant to emergency workers. [National Institute for Occupational Safety and Health (1999)] NIOSH reported that long working hours and irregular shifts increase fatigue and accident risk among drivers, highlighting the need for workload regulation. [European Agency for Safety and Health at Work (2018)] agency emphasized psychosocial risk management in emergency services and recommended organizational support systems to reduce stress. [American Institute of Stress (2020)] institute reported that chronic occupational stress leads to sleep disorders, cardiovascular issues, and reduced immune function. [Alexander & Klein (2001)] study found that ambulance personnel frequently encounter traumatic events, increasing their risk of PTSD and depression. [Bennett et al. (2004)] researchers concluded that coping strategies such as peer support and family interaction help reduce emotional stress among ambulance staff.

Objectives Of The Study

1. To examine the physical, mental, emotional and financial impacts of work related stress on ambulance drivers
2. To identify the coping strategies commonly used by ambulance drivers to deal with stress.

III. RESEARCH METHODOLOGY

The study adopts a descriptive research design to examine the stress experienced by ambulance drivers and its impact on their well-being. The population comprises ambulance drivers working in government, private, and hospital ambulance services in the selected area. A sample of 150 ambulance drivers was selected using the convenience sampling method, and data were collected through a structured questionnaire. Primary data were obtained directly from the respondents, while secondary data were gathered from books, journals, research articles, websites, and reports related to stress management. The collected data were analyzed using percentage analysis, ranking method, mean, tables, and charts to effectively interpret the stress levels and coping strategies of ambulance drivers.

IV. DATA ANALYSIS AND INTERPRETATION:

TABLE 1 SHOWING THE TABLE OF PHYSICAL IMPACT OF WORK RELATED STRESS OF RESPONDENTS

SI no:	Physical Impacts	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
1	I feel physically exhausted after most of my work Shifts	20	27	28	13	12	3.6
2	I experience sleep disturbance because of my work schedule	25	25	26	13	11	3.8
3	My job affects my appetite and eating habits	24	30	23	13	10	3.9
4	I feel physically drained after emergency calls	18	24	34	12	12	3.48
5	My health was worsened since I start this job	13	26	35	21	14	3.24

(Source: Primary data)

Interpretation:

The mean scores range from 3.24 to 3.9, which are above the midpoint value of 3 on the Likert scale. This shows that most respondents generally agree that work-related stress affects their physical health.

The highest mean score (3.9) indicates that eating habits are the most affected area. Sleep disturbance (3.8) and physical exhaustion after shifts (3.6) are also major concerns. Although worsening health has the lowest mean (3.24), it still has moderate agreement.

TABLE 2 SHOWING THE TABLE OF MENTAL IMPACT OF WORK RELATED STRESS OF RESPONDENTS

SI NO:	Mental Impacts	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
1	I feel anxious while driving during emergency situation	19	23	30	14	14	3.38
2	I overthink about work related incidents after duty hours	19	28	23	17	13	3.46
3	I feel mentally drained by the nature of the job	14	18	32	14	22	2.76
4	My mental health has been negatively affected by my job	13	17	31	17	22	2.64

(Source: Primary data)

Interpretation:

The mean scores range from 2.64 to 3.46. The highest mean (3.46) shows that overthinking about work incidents after duty hours is a common issue.

Feeling anxious during emergencies (3.38) also indicates agreement among many drivers. However, the lower means for mental exhaustion (2.76) and negative impact on mental health (2.64) suggest mixed opinions.

TABLE 4.13 SHOWING THE TABLE OF EMOTIONAL IMPACT OF WORK RELATED STRESS OF RESPONDENTS

SI NO:	Emotional Impacts	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
1	I feel emotionally exhausted after dealing with patients and families	22	23	27	12	16	3.46
2	I feel emotionally disturbed after witnessing serious or fatal cases	20	29	25	10	16	3.54
3	I feel sad or depressed due to work experience	20	23	31	13	13	3.48
4	I feel less emotionally connected with my families because of my job	14	19	39	13	15	3.08

(Source: Primary data)

Interpretation:

The mean scores range from 3.08 to 3.54, which are above the middle value of 3 on the Likert scale. The highest mean (3.54) shows that seeing serious or fatal cases affects drivers the most.

Emotional exhaustion (3.46) and feeling sad or depressed (3.48) are also significant. The lowest mean (3.08) shows that feeling less connected with family is less of an issue. Overall, ambulance drivers face a moderate level of emotional stress in their work.

TABLE 4.21 SHOWING THE TABLE OF EMOTIONAL COPING STRATEGIES OF RESPONDENTS

Emotional Strategies	No. of Respondents	Ranking
Talking to family or friends	40	1
Talking to colleagues	34	2
Using social media or phone	29	3
Listening to music	24	4
Positive thinking	22	5
Watching TV or movies	20	6
Avoiding stressful thoughts	16	7
Engaging hobbies	10	8
Seeking professional counselling	8	9

(Source: Primary data)

Interpretation:

The table shows that most people cope with stress by talking to family or friends, followed by talking to colleagues.

Many also use social media, listen to music, or watch TV. Fewer people use positive thinking or hobbies, and seeking professional counselling is the least common coping strategy.

Table 4.22 Showing The Table Physical Coping Strategies Of Respondents

Physical strategies	No .of respondents	Ranking
Adequate sleep or rest	33	1
Healthy eating	26	2
Taking breaks during shifts	17	3
Regular exercise	16	4
Medical check ups	13	5
Relaxation techniques	12	6

(Source: Primary Data)

Interpretation:

The table shows that adequate sleep or rest is the most common physical coping strategy among respondents.

Healthy eating and taking breaks during shifts are also commonly practiced. Regular exercise and medical check-ups are less common, while relaxation techniques are the least used physical coping strategy.

TABLE 4.23 SHOWING THE TABLE OF MEANING OF YOUR WORK OF RESPONDENTS

Meaning of your work	No .of respondents	Ranking
Helping others gives me strength	39	1
Feeling proud of my role	36	2
Feeling satisfied after saving lives	34	3
Accepting challengers as part of growth	32	4
Believing stress is part of job	30	5
Finding purpose in services	28	6
Reflecting on personal values	26	7
Staying hopeful	23	8

(Source: Primary data)

Interpretation:

The table shows that most people find meaning in their work by helping others. They also feel proud of their role and satisfied when they save lives. Other factors like accepting challenges and handling stress are important but less common. Staying hopeful is the least mentioned source of meaning.

V. FINDINGS

Major findings of the study are as follows:

- 64% of the respondents are between 25–45 years, 10% are between 46–55 years, and no one was above 55 years. This shows that most ambulance drivers are young and middle-aged.
- 100% of the respondents are male and no female. This shows that the profession is completely male-dominated.

- 28% of the respondents are 10th pass and another 28% are 12th pass. This shows that most ambulance drivers have school-level education, while only 10% have a degree. The profession mainly depends on practical skills rather than higher academic qualifications.
- 38% of the respondents have 6–10 years of experience. This indicates that most ambulance drivers are moderately experienced, while only 6% have more than 15 years of experience.
- 74% of the respondents work in private ambulance services. This shows that ambulance services in the study area are mainly managed by the private sector.
- 76% of the respondents work in rotational shifts. This shows that most ambulance drivers follow irregular and changing work schedules.

- 42% of the respondents work 8–10 hours per day, and 30% work more than 12 hours. This indicates that long working hours are common in this profession.
- 56% of the respondents earn ₹15,000–₹25,000 per month, while 34% earn below ₹15,000. This shows that most ambulance drivers receive low to moderate income.
- 72% of the respondents have received stress management training, but 28% have not received any training. This shows that mental health support is available but not provided to all drivers.
- 40% of the respondents handle 4–6 calls per shift, and 38% handle 1–3 calls. This shows that ambulance drivers attend multiple emergency calls per shift, indicating a demanding workload.
- The statement “My job affects my appetite and eating habits” records a mean score of 3.90, which is the largest among the physical stress factors. This indicates that changes in eating habits are the most strongly experienced physical effect of work-related stress.
- The statement “I worry about work-related incidents after duty hours” records a mean score of 3.46, which is greater than the other mental stress factors. This shows that worrying about work after duty is the main mental stress experienced by drivers.
- The statement “I feel emotionally disturbed after serious cases” records a mean score of 3.54, which is more than the other emotional factors. This indicates that serious emergency cases create the strongest emotional impact on ambulance drivers.
- 80% of respondents do not receive retirement benefits, while only 20% receive them. This shows that most drivers lack long-term financial security.
- Among the 20% who receive pension benefits, 10% are under PF, 5% under Pension Scheme, and 5% under National Pension Scheme (NPS). This indicates limited pension coverage.
- 74% of respondents receive insurance benefits, while 26% do not. This shows that most drivers have insurance coverage, but a significant portion still lacks it.
- 40.54% pay ₹1000–2000 as premium (largest group). 18.91% pay ₹2000–3500, 16.21% pay ₹3500–5000, 13.54% pay below ₹1000, and 10.81% pay above ₹5000. Most drivers fall under the lower to middle premium range.
- 32% spend ₹1000–2000 and another 32% spend ₹2000–3000 daily. 20% spend above ₹3000, 12% spend ₹500–1000, and 4% spend below ₹500. This shows that most drivers spend between ₹1000–3000 per day on diesel.
- 66% of respondents have lost income due to injury or work-related issues, while 34% have not. This indicates that income loss due to health or accidents is common.
- Insurance coverage (44 respondents) is ranked first. Job security (30) and pension benefits (29) follow. Paid medical leave (22) is ranked last. This shows that insurance is considered the most important financial protection.
- Talking to family or friends (40 respondents) is the most common coping method. Talking to colleagues (34) and using social media (29) are also common. Seeking professional counselling (8) is the least used method.
- Adequate sleep or rest (33 respondents) is the most common physical coping strategy. Healthy eating (26) and taking breaks (17) are also practiced. Relaxation techniques (12) are the least used.
- (39) respondents feel that helping others gives them strength. (36) feel proud of their role, and (34) feel satisfied after saving lives. Staying hopeful (23) is the least mentioned source of meaning. This shows that drivers find strong purpose in helping others.

VI. SUGGESTIONS

Major suggestions for the study as follows:

- Provide regular stress management training for ambulance drivers.
- Ensure proper insurance and pension benefits for financial security.
- Reduce long working hours and manage shift schedules properly.
- Encourage regular health check-ups and physical fitness programs.
- Offer professional counselling support to improve mental well-being.

VII. CONCLUSION

The study on stress management of ambulance drivers reveals that the profession has a significant impact on their physical, mental, emotional, and financial well-being. The findings show that drivers experience physical strain such as fatigue, sleep disturbances, and changes in eating habits due to long working hours and continuous emergency duties.

Mentally, they often feel anxious during emergency situations and continue to think about work-related incidents even after duty hours. Emotionally, exposure to serious and critical cases causes emotional disturbance and exhaustion. Financially, many drivers receive only low to moderate income, lack retirement benefits, and face income insecurity due to work-related risks.

The study also identifies the coping strategies adopted by ambulance drivers to manage stress. Most drivers rely on informal support systems such as talking to family members, friends, and colleagues, along with taking adequate rest to reduce stress. However, professional counselling and structured mental health support are not widely utilized. Overall, the findings conclude that ambulance driving is a highly stressful occupation, and there is a strong need for better organizational support, improved financial security, and effective stress management programs to enhance the well-being of ambulance drivers.

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