

**THE PSYCHOSOCIAL EXPERIENCE OF EMERGENCY MEDICAL
SERVICES PERSONNEL AND HOW THIS AFFECTS THEIR LIVES**

BY

MZAYIFANI CLIVE SIBANDA

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SUPERVISOR: Q.M. TEMANE

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PREFACE

Article format

The article format, as described in the General Regulation A 13.7 of the North West University, chosen for purposes of this mini-dissertation that is part of the requirements for a professional masters degree.

Selected journal

The target journal for submission of the current manuscript is the *South African Journal of Psychology*.

Letter of Consent

Please see the letter of consent from the co-authors on the next page by which the co-author grants permission that the manuscript, *The psychosocial experiences of emergency medical service personnel* may be submitted for the purpose of a mini-dissertation by the first author, Mzayifani Clive Sibanda.

Page numbering

For the purpose of this mini-dissertation page numbering run through for the whole document. For submission of the manuscript numbering is according to requirements and starts on the title page of the manuscript.

LETTER OF CONSENT

I hereby give consent that Mzayifani Clive Sibanda may submit this manuscript for purposes of a mini-dissertation

Q.M. TEMANE

ABSTRACT

Background: The Emergency Medical Services (EMS) has been in existence since 1972 (Boyd & Cowley, 1983). It started improving in the 1980s due to the changes in infrastructure of the roads and the lifestyles of South Africans. This gave birth to the review of EMS and the scope of practice for all EMS personnel. As accidents started increasing so did the level of training and the scope of practice widened. EMS evolved to a level where Advanced Life Support (ALS) are allowed to do certain procedures that doctors do and even administer medication as high as schedule 6 and 7.

Aims: To establish the psychosocial experiences of EMS personnel in the context of a developing rural area.

Method: A survey-based questionnaire was implemented to assess levels of wellness, stress vulnerability and impact of events in the line of duty. Two hundred participants were selected for the study on the basis of availability. Informed consent was obtained from the Head of Department in the Provincial Department of Health, participants and the North West University.

Results: The results that show that there is some form of Post Traumatic Stress Disorder (PTSD) in the working environment of EMS personnel as they are exposed to different kinds of affecters. There stress level within EMS in the North West provinces yielded 31% of the respondents suffering from high stress and 50% of the respondents suffering from moderate stress. This shows that personnel in EMS in deed suffer from stress.

Conclusion: The level of stress in EMS should be given the urgent attention that it warrants as EMS personnel are the first to respond to emergency scenes. They are the first people that the patient comes into contact with before the patients are taken to hospital. EMS personnel should be in the right frame mind to take appropriate decisions regarding the treatment of patients which would determine whether such patients live or die.

Guidelines for Authors

South African Journal of Psychology (SAJP)

1. The manuscript should be typed in 12-point font (Times Roman) double-spacing.
2. The first page should contain the title of the article, the name(s) of the author(s), as well as the address of the author to whom the correspondence should be addressed.
3. The abstract should be on a separate page.
4. The text of the article should be started on a new page.
5. Indicate in the beginning of a new paragraph by indenting its first line two spaces, except when the paragraph follows a main or secondary heading.
6. The headings should all start at the left margin, and should not be numbered. The introduction to the paper does not require a heading.
7. The referencing style of the SAJP is similar to those used by the British Psychological Society and the American Psychological Association (See *SAJP Guide to Authors*).
8. In the reference list, the first line of each reference starts at the left margin; subsequent lines are indented two spaces.
9. Illustrations, tables and figures should be prepared on separate A4 sheets. They should be numbered consecutively, grouped together, and attached to the end of the manuscript. Tables should be drawn without grid lines separating the cells in the tables. The appropriate positions in the text should be indicated.
10. Authors are requested to pay attention to the proportions of the illustrations, tables and figures so that they can be accommodated in single (82mm) or double (179mm) columns after reduction, without wasting paper.
11. Once the article has been accepted for publication, a computer diskette must also be submitted. MS Word is the preferred text format. The manuscript and author or authors name(s) should be clearly indicated on the diskette.

12. As the ASJP does not employ a full-time language editor, it is recommended that, once the articles have been accepted for publication, authors send their manuscripts to an external language specialist for language editing. Furthermore, it is recommended that a note indicating that the manuscript had been language edited accompany the final submission of the manuscript.

The psychosocial experience of emergency medical services personnel and how this affects their lives

Mzayifani Clive Sibanda* and Q.M. Temane
North West University (Mafikeng Campus)

Correspondence to:

M.C. Sibanda
Faculty of Commerce and Administration
Graduate School of Business and Government Leadership
Private Bag X2046
Mmabatho
2735

Abstract

The aim of the study was to establish the psychosocial experiences of EMS personnel in the context of a developing rural area. A survey-based questionnaire was implemented to assess levels of wellness, stress vulnerability and impact of events in the line of duty. Two hundred participants were selected on the basis of availability. The results of the study showed that EMS personnel experience stress levels that can be characterized as moderate to high and that personnel are adversely affected by events. However, in the overall EMS personnel experience their jobs as satisfying. It was recommended that employee wellness programmes be established and implemented to reduce the levels of stress in EMS personnel.

Key words: EMS, employee well-being, stress, job satisfaction.

MANUSCRIPT

**THE PSYCHOSOCIAL EXPERIENCE OF EMERGENCY MEDICAL
SERVICES PERSONNEL AND HOW THIS AFFECTS THEIR LIVES**

BACKGROUND AND REVIEW OF LITERATURE

The Emergency Medical Services (EMS) is regarded as an essential service (American College Emergency Physicians (ACEP), 2004) to all residents in the districts or areas they service. EMS is essential in the sense that EMS personnel are the first responders to scenes of accidents or house where the ill is. EMS must be capable of addressing the day-to-day need for effective out of hospital emergency medical response. The EMS personnel are required to give medical help within the “Golden Hour” (Pan, 1998). The Golden Hour is the hour immediately after a serious injury, when caring for the injured is critical to the victim’s survival. Timing is crucial as patients in or near shock can die if not treated within the “Golden Hour” after injury (Locke, 1982) and attending to patients within the “Golden Hour” would also determine the patient’s prognosis. Thus EMS personnel are expected to function optimally as the patient’s life is dependent on their prompt and accurate treatment. It is evident that persons in this line of work are prone to several pressures as their decisions could often translate into the survival or demise of patients. There is little if any information on the psychosocial experiences of EMS personnel in South Africa, therefore this study was an attempt to understand the psychosocial experiences of EMS personnel.

Work context has been shown to be important in the experiences in the lives of employees (Bowron and Todd, 1999). It is known that work contexts in the rural and urban areas especially in South Africa are not the same as historically, resources have been shown to be more focused on urban areas. The present study obtains within a developing rural area in South Africa with the challenges of the availability of resources amongst them. The argument in this study is that EMS personnel in the rural areas would not have easy access to psychological assistance in comparison to those in urban areas and thus would have unique psychosocial experiences of their work context.

Having been engaged in this line of work for years the primary researcher came to realise that there are several other factors that add to the stress level of the EMS personnel especially when members get involved in accidents and are injured. Some are involved in

accidents while escorting patients and this increases their stress level in addition when the personnel is found guilty during disciplinary hearing, they have to pay for the damages. The second factor that increases the stress is that members face traumatic situations such as gruesome accidents where they have to face dying patients and they are not able to save their lives because it is either too late, or they are not sufficiently skilled or equipped to treat the patient further as the treatment required is beyond their scope of practice. Consequently, EMS personnel have to live with a heavy burden of being unable to save a life as they have been trained and required to do. A body of literature also supports some of these observations made by the researcher such as Taylor and Frazer, 1982; Cydulka, Emerman, Shade and Kubincanek, 1992; Alexander and Klein, 2001.

Similar studies to the present one has been conducted in the United States. It has been shown that after critical incidents peers were regarded as either always or frequently supportive by 40 of the 90 respondents. How colleagues react to those who have had harrowing experience have a bearing on how well they adjust (e.g. Taylor and Frazer, 1982; Alexander and Wells, 1991). The survey by Taylor and Frazer (1982), suggest that peer support is much more likely to be available than support from seniors in relation to work-related stress (Alexander and Walker, 1994) and by nurses and doctors working in trauma units (Alexander and Atcheson, 1998). The situation is not the same in South Africa as the nurses and doctors do not have insight into what Emergency Care Practitioners (ECPs) do outside the hospital. This creates a situation where doctors and nurses cannot give the EMS personnel the necessary support as they too are very busy treating patients or attending to other matters.

Cydulka et al. (1997) conducted a study on the stress levels in EMS personnel in 1997 in the United States of America (USA). The study indicated that stress levels in the lives of EMS personnel were very high. This manifested primarily as somatic distress, secondarily as organisational stress and job dissatisfaction and lastly as negative patient attitudes. Stress levels and subset manifestations of occupational stress among EMS personnel varied depending on gender, marital status, age, level of training and function, on salaries or volunteer status, length of time as an EMT, size of the organisation, city

and population served. Recommendations should be considered to address stresses peculiar to individuals in EMS system needs.

Eastham, Thompson and Ryan (1991) conducted a study on the life span of the ambulance personnel especially those that were exposed to working with HIV/AIDS patients. Thompson, et al, (1991) found that respondents in another study, with higher AIDSTRESS scores were the Basic Life Support (BLS) providers, men, paid providers, personnel with more than three years field experience, those working in urban areas, personnel with no formal education beyond high school and those who stated that their HIV/AIDS training was inadequate. From this study it is evident that the impact of HIV/AIDS on the service providers is quiet dramatic and some of the members cannot handle what is required by given situations.

Tkach and Rumpf (1995) also conducted a study on surviving and excelling on the streets which was more focused on the life of the Emergency Medical Services. The study revealed that when EMS providers at both the BLS and Advanced Life Support levels (ALS) leave their training program, they are armed with new found knowledge, but they usually lack the appropriate life experiences to excel and survive on the streets. As these providers enter the real world of EMS, they face the challenge of making life-and-death decisions in uncontrolled environments. This includes making appropriate decisions while functioning effectively even in potentially dangerous situations.

The members usually suffer from burnout and high turn-over rates due to the stress levels of the job. This indicates that no matter what levels of training one receives, the members are never prepared enough to deal with the situations that they come across, because the training is always different from the real life situations. During training members are exposed to practicing patient treatment on training manikins and one can make as many mistakes as possible, but in real life and practical situations, they have to deal with real patients requiring appropriate responses and informed decisions. There is no training in the EMS context that can prepare one for situations that members come across on a regular basis as real life situations involving patients are unique and different.

Bowron and Todd (1999), undertook a study into the job stressors and job satisfaction in a major metropolitan public EMS. The purpose of their study was to identify the job stressors that predict the level of job satisfaction among pre-hospital personnel. It is important that EMS managers identify predictors of job satisfaction in order to maximize job performance among prehospital personnel. This study was conducted within a large urban Emergency Medical Services performing approximately 60,000 Advanced Life Support (ALS) responses annually. Their study suggests that job satisfaction and job performance are positively correlated.

The consequences of working under stressful conditions have in some cases led to post-traumatic stress disorder (PTSD) according to the NIMH study (2001). PTSD is an extremely debilitating condition that can occur after exposure to a terrifying event or ordeal in which grave physical harm occurred or was threatened. NIMH states that traumatic events that can trigger PTSD include violent personal assaults such as rape or mugging, natural or human-caused disasters, accidents, or military combat. According to the study, military troops who served in Vietnam and the Gulf Wars; rescue workers involved in the aftermath of the Oklahoma City Bombing; survivors of accidents, rape, physical and sexual abuse, as well as other crimes; immigrants fleeing violence in their home countries; survivors of the 1994 California earthquake, the 1997 South Dakota floods, hurricanes Hugo and Andrew as well as people who witness traumatic events are among the people who may develop PTSD. Families of victims can also develop the disorder. However, through research supported by the National Institute of Mental Health (NIMH) and the Department of Veterans Affairs (VA), effective treatments have been developed to help people with PTSD. Research also helps scientists to gain improved understanding of the condition and how it affects the brain and the rest of the body.

NIMH has identified that many people with PTSD repeatedly re-experience the ordeal in the form of flashback episodes and that they also have sad memories and nightmares. The other experiences are frightening thoughts especially when they are exposed to events or objects reminiscent of the trauma. Anniversaries of the events can also trigger symptoms and usually people with PTSD also experience emotional numbness and sleep

disturbances, depression, anxiety and irritability or outbursts of anger. Feelings of intense guilt are also common. Most people with PTSD try to avoid any reminders or thoughts of the ordeal. PTSD is diagnosed when symptoms last more than one month.

According to the study PTSD can develop at any age, including in childhood. It does not have age restrictions as everyone experiences some form of trauma at some stage in one's life. Children experience trauma as a result of parental abuse and sibling abuse.

Symptoms typically begin within three months of a traumatic event, although occasionally they do not begin until years later. Once PTSD occurs, the severity and duration of the illness varies. Some people recover within six months, while others suffer much longer. Therefore, the research has demonstrated the effectiveness of cognitive-behavioral therapy, group therapy and exposure therapy, in which the patient repeatedly relives the frightening experience under controlled conditions to help him or her work through the trauma. In addition he or she receives medications that help ease the symptoms of depression and anxiety and help promote sleep. Scientists are attempting to determine which treatments work best for which type of trauma. There are other physical and emotional illnesses that tend to accompany PTSD and they tend to make the condition worse in some patients. Co-occurring depression, alcohol or other substance abuse, or another anxiety disorders are not uncommon. The likelihood of treatment success is increased when these other conditions are appropriately diagnosed and treated as well.

Headaches, gastrointestinal complaints, immune system problems, dizziness, chest pain, or discomfort in other parts of the body are common. Often, doctors treat the symptoms without being aware that they stem from PTSD. NIMH, through its education programme, encourages primary care providers to ask patients about experiences with violence, recent losses and traumatic events, especially if symptoms keep recurring. When PTSD is diagnosed, referral to a mental health professional that has had experience treating people with the disorder is recommended.

People who have been abused as children or who have had other previous traumatic experiences are more likely to develop the disorder. This also involves people working in

emergency services, army personnel, the police as well as members who have lost loved ones.

NIMH and the Veterans Association (VA) sponsor a wide range of basic, clinical and genetic studies of PTSD. In addition, NIMH has a special finding mechanism, called RAPID Grants, which allows researchers to immediately visit the scenes of disasters, such as plane crashes or floods and hurricanes, to study the acute effects of the event and the effectiveness of early intervention. Research by NIMH has shown that PTSD alters a number of fundamental brain mechanisms, as a result abnormalities have been detected in brain chemicals that mediate coping behaviour, learning and memory among people with the disorder. Recent brain imaging studies have detected altered metabolism and blood flow as well as anatomical changes in people with PTSD.

Other adverse effects of working under difficult conditions seem to be turnover intentions. A study conducted by Elangovan, 2001 was meant to address the confusion that prevails over the nature of the relationship between satisfaction and commitment regarding employer turnover. It examined the pattern of relationships among stress, satisfaction, commitment and turnover intentions by employing structural equations analysis approach. The results indicate that there are strong casual links between stress and satisfaction (higher stress leads to lower satisfaction) and between satisfaction and commitment (lower satisfaction leads to lower commitment). In addition, a reciprocal relationship exists between commitment and turnover intentions (lower commitment leads to greater intentions to quit which, in turn, further lowers commitment).

A similar study was conducted by a group from Taiwan (Chiu, Chien, Lin, Hsiao, 2005) on hospital employees to understand job stress and the turnover intentions. The results indicated that global job satisfaction influences turnover intentions and that organisational commitment is more for internals than externals. Organisational commitment influences turnover intentions similarly for both internals and externals. Furthermore, the influence of perceived job stress on job satisfaction and organisational

commitment is stronger for externals than internals. Leadership support influences job satisfaction more for internals than externals.

It is also generally accepted that stress has a negative relationship with psychological well-being and is positively related to staff turnover, turnover intentions and the rates of workplace absence (Office of the Public Service Merit and Equity, 2005) As it is with the research conducted that there is a high rate of absenteeism as a result of lack of satisfaction at work or the work pressure becoming unbearable. The respondents then choose to stay away from work and replacements have to be called in and overtime was paid for that. This increases the expenditure for the Department of Health because the department has to pay for two people, the one payment is for overtime and the other payment goes to the member who is not at work.

This preceding discussion reveals that the working conditions of EMS personnel are complex and have an adverse effect on the psychological well-being of such personnel. Most importantly, evidence from the literature showed that effects such as abuse of substances, poor relationships and even PTSD are quite common. However, most of these findings have been in the United States of America and partly elsewhere.

Problem Statement

Little if any research has been conducted in South African on the working conditions and experiences of EMS personnel. The literature reviewed for this study also indicates that the family lives of EMS personnel are adversely affected by their working conditions. The study is important for management purposes as it will provide information on how to respond to the psychosocial experience of EMS personnel.

Aim of the research

The primary aim of this research was to establish the factors associated with the psychosocial experiences of EMS personnel in the North West Province. The secondary

aim of the study was to establish the nature of services that may be helpful to alleviate the working conditions of EMS personnel.

RESEARCH METHODS

Design

This was a survey-based design based on the quantitative measures and very limited qualitative measures. Surveys are useful for collecting information at one point only. This design can be regarded as a post-test only research design.

Participants

Two hundred participants were selected for this study out of a population of 617 EMS personnel in the North West Province. A purposive sampling technique was implemented. The table 1 reflects a summary of the characteristics of participants:

Table: 1

1.	Gender	Percentage
	Male	62%
	Female	38%
2.	Age group	
	18-24	3%
	25-34	47%
	35-44	36%
	45-60	14%
3.	Church Attendance	
	Yes	84%
	No	16%
4.	Use of alcohol	
	Yes	40%
	No	60%

The data

Table 1 show that there were 62% males and 38% females in the study. The age group of the respondents are reflected as follows: 18-24 (3%); 25-34 (47%); 35-44(36%); and 45-60 (16%). The age group that was most prevalent is the 25-34 age group and the 35-44 age group respectively. This can be attributed to the fact that most respondents had worked in EMS for four or five years ago. Some respondents worked in other professions before they joined EMS hence the prevalence of the 35-44 in the service. The respondents who stated that they attend church were 84% of the sample and those that did not attend church amounted to 16%. 60% of the respondents indicated that they do not use alcohol as compared to 40% indicated that they use alcohol. It is interesting however that many cases have previously been reported of members who arrive at work under the influence of alcohol and were subsequently disciplined.

Measuring Instruments

A compiled questionnaire comprising of different sections was used in this study. The questions were in the following categories:

- A biographical questionnaire compiled by the first author was used to measure the gender, age, the social orientation and participation in sporting and church activities by respondents.
- Life satisfaction questionnaire measured the satisfaction of the participants' life to the current working situation and life in general (Diener, Emmons, Larsen & Griffin, 1985).
- The Affectometer (Hird, 2003) measured the wellbeing of the participants also referred to as a general sense of well-being or general happiness.
- Impact of event scale was used by (Horowitz, Wilner, and Alvarez, 1979) to evaluate experiences of avoidance and intrusion which attempt to reflect the intensity of post-traumatic phenomena in the lives of EMS personnel.

- General Health questionnaire (GHQ) is used to measure the general health of the respondents. The GHQ is aimed at detecting common symptoms, which are indicative of the various syndromes of mental disorder, and differentiates between individuals with psychopathology as a general class and those who are considered to be normal (Goldberg and Hillier, 1979).
- Vulnerability to stress: this questionnaire attempts to identify areas in a person's life that make them vulnerable to stress.

The instruments used in this study were compiled into a booklet that was dispatched to EMS personnel. The EMS personnel were not required to disclose any identifying information that would reveal who they were. They were assured that information provided through the questionnaire would be used for research purposes only and would be kept strictly confidential.

Procedure

Permission was sought from the Head of Department of the Department of Health in the North West for the study. Following the granting of permission by the Head of Department, a consent form was dispatched to EMS personnel to request their participation in the study. Confidentiality was maintained through limited information request. Information like the name, identity number, home address, work address was excluded in the questionnaire. This was to maintain complete anonymity and confidentiality of the participants' response. If these were included, not all the members would be willing to complete the questionnaire for fear that they would be exposed regardless of the fact that they would have been informed that the survey would be strictly confidential.

Data Analysis

The data were collected and captured using the excel spreadsheet to compile the data set then captured by the researcher and an assistant. After the collation of the information, the data were sent off for analysis and the SPSS (version. 14) software was used. Largely, descriptive statistics were used to explain the psychosocial experiences of EMS personnel and findings were presented in tables.

RESULTS

A survey was conducted by sending out questionnaires to employees in the EMS division. About 200 questionnaires were sent out and 198 were returned. Of the 198 that were returned only 158 could be used as they were completed correctly. Some of the questionnaires were either incomplete or not completed correctly. Based on the data, the respondents were asked about frequency of participation in physical and religious activity as well as the use of medication.

Table 2: Activities of respondents

Participation in physical exercise	Frequency	Percent
1-3 times per week	79	62
4-6 times per week	47	37
7 times and above	2	2
Religious activity	Frequency	Percent
Never	20	16
1-3 times per week	71	55
4-6 times per week	17	13
7 times and above	25	20
Use of medication	Frequency	Percent
Yes	29	23
No	99	77
Total	128	100

Table two shows that the respondents exercised once to thrice a week (62%); four to six times per week (37%); and seven times and above (2%) per week. In response to participation in religious activities revealed that respondents went to church once to thrice times per week (55%); four to six times per week (13%); seven times and above (20%); and those that do not attend church (16%). For the use of medication question 77% of the respondents indicated that they did not use medication while 23% stated that they did.

Table 3: Categories of hours worked by EMS personnel

Categories of hours worked	Frequency	Percent
102-140	2	2
141-169	12	9
170-208	12	9
209-247	97	76
248 and above	5	4
Total	128	100

The data in table three reflect the categories of hours worked by EMS personnel sampled in this study. Members who worked 102-140 per month were (2%); 141-169 hours made up (9%); 170-208 (9%); 209-247 (76%); and 248 and above (4%). These are hours worked in a month and the permissible hours to be worked by members are 160 to 176 hours per month for shift workers. It is evident that most members exceed the limit of hours as set out in the South African Labour Relations Act, Act no 66 of 1995.

Table 4: Number of hours worked overtime

Number of hours worked overtime	Frequency	Percent
6	9	7
12	30	23
18	33	26
24	56	44
Total	128	100

The respondents were also asked about hours worked overtime and table four shows hours worked overtime EMS personnel over and above the normal hours worked. The members stated that they worked six hours overtime (7%); 12 hours overtime (23%); 18 hours overtime (26%); and 24 hours overtime (44%). As these results show, most members were inclined to work overtime.

Table 5: Life satisfaction of respondents

Categories of life satisfaction	Frequency	Percent
Low life satisfaction	18	14
Moderate life satisfactor	51	40
High life satisfaction	59	46
Total	128	100

The respondents were also asked about their life satisfaction as measured by the satisfaction with life scale (cf. Diener, et al, 1985). Categories of low life satisfaction, moderate life satisfaction and high life satisfaction were categorised and computed. Based on these categories, low life satisfaction reflected a 14% whereas the moderate life satisfaction reflected a 40%; and high life satisfaction range was indicated at 46%. According to the results members were satisfied with their lives. Evidence from literature shows that there is a tendency to over-report feelings of well-being in PTSD sufferers does exist. The table five reflects a summary of these observations.

Table 6: Relationship between numbers of hours worked and satisfaction with the job.

Categories of hours worked	Overall satisfaction with work			Total
	Very Satisfying	Satisfying	Very Unsatisfying	
102-140	1	1	0	2
141-169	2	6	4	12
170-208	1	6	5	12
209-247	10	58	29	97
248 and above	1	0	4	5
Total	15	71	42	128

The relationship between the number of hours worked and satisfaction with the job was computed and is reflected in table 6. Overall, the respondents in this study stated that they were satisfied with their jobs relative to the number of hours worked. These results could suggest that members are either happy with their work because they worked overtime and they were being paid for this, which is extra income for them hence they spent extra time at work.

Table 7: Impact of events

Impact of events	Frequency	Percent
Moderately affected by events	93	73
Affected quite a bit	33	26
Extremely affected by events	2	2
Total	128	100

Table 7 reflects the impact of events on EMS personnel in their line of duty. EMS personnel indicated that they were moderately affected by events (73%); quiet a bit (26%); and extremely affected (2%). Quite often, EMS personnel who were adversely affected by events were requested to consult a psychologist. It would be interesting to find out what exactly influenced the report by the respondents especially consulting psychologists could be considered negative by friends.

Table 8: Levels of stress experienced by respondents

Levels of stress	Frequency	Percent
Low stress	24	19
Moderate stress	64	50
High stress	40	31
Total	128	100

Table 8 depicts the levels of stress experienced by the respondents. The respondents in the study indicated their levels of stress as follows: low stress (19%); moderate stress (50%); and high stress are (31%). These results indicate that EMS personnel suffer at different levels of stress.

The results in this study show that although working in EMS is quite hazardous, respondents still had a moderate to high life satisfaction, moderate impact by negative events, but were still having stressful experiences.

DISCUSSION

The results of the study showed that stress levels are moderate to high among EMS personnel. Cydulka, Emerman, Shade and Kubincanek (1992) argued that stress levels are very high in the lives of EMS personnel as also reflected in this study. Although the link between the stress experienced by EMS personnel and PTSD was not done, it is evident in the literature that PTSD plays a role in the psychosocial experiences of EMS personnel. The impact of events on EMS personnel was rated as moderate to high by the EMS personnel who participated in this study. Future studies may want to fully establish the link between x and y.

The results also indicated that job satisfaction is very vital. The results reflect that members who are either very satisfied or satisfied with their jobs have yielded 86% together, 15% being very satisfied and satisfied (71%). In this study this was linked to the number of hours worked which may be a shorthand description of performance. Bowron and Todd (1999) also conducted a similar study which reveals that job satisfaction and job performance were positively correlated. If an individual is not satisfied at work, his or her performance would be negatively affected. The respondents in this study seemed to have found a balance between the number of hours they worked and their job satisfaction.

According to the literature reviewed for this study it concluded that post traumatic stress is not only found in EMS personnel elsewhere in the world (Taylor and Frazer, 1982;

Alexander & Wells, 1991) but also among EMS employees in South Africa as indicated by the vulnerability to stress findings. Linking the stress experienced by EMS personnel to impact of events, well-being may be an important future research goal to control for artifactual observations. The question could be whether respondents who were satisfied with their jobs and loved being at work who earned high salaries had no stress at all because they are living a good life or could it be a reflection of the number of years they have worked in EMS or the type of work done in EMS.

In this study the respondents who suffered from moderate stress comprised 50% of the entire group. These members are either earning a sufficient salary to come by and thus their stress level is not high; or they are not long in the service and thus have not experienced that much stress or they could fall within the same category as those suffering from low stress. These members also might have some threshold and thus can control their stress level. However, 31% of the respondents stated that they suffered from high stress level (31%) of the respondents. These members are either long in the service and earning a low income and thus become frustrated in life. What adds to their frustrations is that they have been working for longer years and yet they are still at a low salary bracket with added stress from what they come across during working hours.

The respondents who experienced high levels of stress may resort to intoxicating substances, like alcohol or drugs, which adds more to their financial nightmare as they are too costly, trying to run away from their problems. This further causes more financial problems for them as they have to stay without money for most of the time and thus increase their stress level. For those who do not use intoxicating substances, the stress level is either increased by the lack of any support group or if it is available, it is insufficient. Such members resort to keeping all the stress to themselves and then bring it out when they are overwhelmed. This, in most cases is the cause of suicide because members feel worthless and they cannot take it anymore and instead the best solution is to take their own lives.

The findings of this study revealed that stress is generally very common in EMS it is not caused by the fact that members come across grueling circumstances or lack on enough income but it could be due to the environment in which the members are working as well as what they are exposed to on a day-to-day basis at work. The findings also revealed that in spite high salaries EMS employees still experience stress member can be earning a high salary but this does not mean that they are satisfied with their work at all. The basis of this is the lack of support where members can go and vent out their frustrations.

Personal experience in the field revealed on numerous occasions that members who attend debriefing sessions has a better coping mechanism with stress unlike the one who has nothing at all. Debriefing helps the members to distress and thus forget about their work life experiences. This in itself can reduce stress by about 60% to 70% and help members cope better with stressful situations.

CONCLUSION

The conclusion that can be drawn from the study is that the quality of career choice and interaction with physicians are predictive of global job satisfaction within EMS. Future studies should examine specific characteristics of the physician-paramedic interface that influence job satisfaction and attempt to generalise these results to other settings. One can also argue that EMS personnel based in rural areas or small cities experience stress in a different form as compared to those that are in big cities and urban areas. From the data provided in this study it can concluded that EMS employees react to stress in different ways. Those in the rural areas have a higher stress threshold than those in the urban areas. This is manifested by the upbringing of the individual. When one grows in the rural areas one is not exposed to psychological services and thus will not see the need to consult one once stressed, as a result, the body gets used to the stress levels and thus build up a strong threshold. Members in the urban areas are keen on consulting to psychologists as they have easy access to such services and thus their stress threshold is lower as compared to individuals in the rural areas.

With further perusal of the information one can see that PTSD does not only manifest itself in EMS personnel but it is found almost everywhere. When one looks at military troops, ordinary civilians that experience trauma in one way or the other and many other people that are affected by PTSD, one can see the signs and symptoms are the same in all context. The only distinction that can be made is the stress level of the individuals. The other contributing factor is the manner in which the individual deals with the stress. One can further deduce that the more one gets exposed to the causative factors the higher the level of stress one would experience. This in itself needs to be looked at very carefully and advice should be given to the employers that some form of support is necessary in the work place. Employees should be encouraged to attend the support groups as they would not be helpful if they are not attending services that are not there. It is also advisable that the Department of Health should employ the services of Social Workers and Psychologists who will only focus on the EMS personnel.

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www.emeraldinsight.com

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QUESTIONNAIRE

I am currently conducting a study on experiences in the workplace and feelings about life in general. There are four (4) sets of questions attached to this document. There are no right and wrong answers to these questions. The first feeling about your experience when reading the question is possibly the best answer. Please answer each and every question.

Your participation in this study is completely confidential thus no identifying information is required from you. It will take no longer than forty (40) minutes to answer all questions. We would greatly appreciate your voluntary participation.

Indicate with a tick (x) whether you are participating voluntarily.

Yes

No

Biographical Questionnaire

Instructions

Underneath are questions that need to be completed. Please ensure that you answer each and every question and do not leave any question unanswered. Indicate your answer by making a cross or putting a circle around your correct answer.

Please list the number of hours worked you work per month _____

In the hours you work per month aabove, how many of these are overtime? (*Tich the number of hours worked*)

6	12	18	24
---	----	----	----

Taking evrything into account, I think my job is.... (*tick the applicable response*)

Very Satisfying	Satisfying	Very Unsatisfying
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Do you smoke

Yes	No
-----	----

Do you attend church

Yes	No
-----	----

Do you consider yourself a spiritual person

Yes	No
-----	----

Present age group (*put a cross in the correct column*)

18-24	25-34	35-44	45-60
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Gender (*tick appropriate column*)

Male	Female
------	--------

Do you take any alcoholic beverages?

Yes	No
-----	----

If yes to the above, how often do you consume these?

1-3 times a week	4-6 times a week	7 times & above
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Do you participate in any exercise activities?

Yes	No
-----	----

How often do you particpate in exercise activities?

1-3 times a week	4-6 times a week	7 times & above
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Would you consider yourself a religious person?

Yes	No
-----	----

If you said yes to the above, how often would you participate in religious activity?

Never	1-3 times per week	4-6 times per week	Everyday
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Are you currently using any medication as a result of your working circumstances?

Yes	No
-----	----

I would describe my relationship with my wife/hubby/ dependant as:

Very relaxed	Casual	Stressful
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Taking all your experiences at work together, would you rather:

Talk to a Psychologist	Talk to a pastor	Talk to my spouse/partner	Talk to my colleague
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Have you ever had the need to take alcohol on the job due to stress?

Yes	No
-----	----

LIFE SATISFACTION QUESTIONNAIRE

Instructions

Below are five statements with which you may agree or disagree. Using the 1 to 7 scale below, indicate your agreement with each item by crossing the appropriate number in line with that item. Please do not write comments on the documents, just tick the appropriate block.

	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree						
	1	2	3	4	5	6	7						
1	In most ways my life is close to my ideal						1	2	3	4	5	6	7
2	The conditions of my life are excellent						1	2	3	4	5	6	7
3	I am satisfied with my life						1	2	3	4	5	6	7
4	So far I have forgotten the important things I want in life						1	2	3	4	5	6	7
5	If I could live my life over, I would change almost nothing						1	2	3	4	5	6	7

AFFECTOMETER

Instructions

This inventory consists of 20 sentence items. Read each sentence and decide how often the feeling was present over the past few weeks, according to the following graded scale:

Not at all	Occasionally	Some of the time	Often	All the time
1	2	3	4	5

You are to mark your answer next to each statement as it applies to you. Please answer every statement.

1	My life is right on track.	1	2	3	4	5
2	I wish I could change some part of my life.	1	2	3	4	5
3	My future looks good.	1	2	3	4	5
4	I feel as though the best years of my life are over.	1	2	3	4	5
5	I like myself.	1	2	3	4	5
6	I feel there must be something wrong with me.	1	2	3	4	5
7	I can handle any problems that come up.	1	2	3	4	5
8	I feel like a failure.	1	2	3	4	5
9	I feel loved and trusted.	1	2	3	4	5
10	I seem to be left alone when I don't want to be.	1	2	3	4	5
11	I feel close to people around me.	1	2	3	4	5
12	I have lost interest in other people and I don't care about them.	1	2	3	4	5
13	I feel I can do whatever I want to.	1	2	3	4	5
14	My life seems stuck in a rut.	1	2	3	4	5
15	I have energy to spare.	1	2	3	4	5
16	I can't be bothered doing anything.	1	2	3	4	5
17	I smile and laugh a lot.	1	2	3	4	5
18	Nothing seems very much fun anymore.	1	2	3	4	5
19	I think clearly and creatively.	1	2	3	4	5
20	My thoughts go around in useless thoughts.	1	2	3	4	5

IMPACT OF EVENT SCALE

Instructions

The following is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you *during the past 7 days* with respect to the disaster. How much were you distressed or bothered by these difficulties?

		Not at all	A little bit	Mode rately	Quiet a bit	Extre mely
1	Any reminder brought back feelings about it	0	1	2	3	4
2	I had trouble staying asleep	0	1	2	3	4
3	Other things kept making me think about it	0	1	2	3	4
4	I felt irritable and angry	0	1	2	3	4
5	I avoided letting myself get upset when I thought about it or was reminded of it.	0	1	2	3	4
6	I thought about it when I didn't mean to.	0	1	2	3	4
7	I felt as if it hadn't happened or wasn't real.	0	1	2	3	4
8	I stayed away from reminders about it.	0	1	2	3	4
9	Pictures about it popped into my mind.	0	1	2	3	4
10	I was jumpy and easily startled.	0	1	2	3	4
11	I tried not to think about it.	0	1	2	3	4
12	I was aware that I still had a lot of feelings about it, but I didn't deal with them.	0	1	2	3	4
13	My feelings about it were kind of numb.	0	1	2	3	4
14	I found myself acting or feeling like I was back at that time.	0	1	2	3	4
15	I had trouble falling asleep.	0	1	2	3	4
16	I had waves of strong feelings about it.	0	1	2	3	4
17	I tried to remove it from my memory.	0	1	2	3	4
18	I had trouble concentrating.	0	1	2	3	4
19	Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.	0	1	2	3	4
20	I had dreams about it.	0	1	2	3	4
21	I felt watchful and on guard.	0	1	2	3	4
22	I tried not to talk about it.	0	1	2	3	4

GENERAL HEALTH QUESTIONNAIRE
(Goldberg & Hillier, 1979)

Instructions

we would like to know if you had any medical complaints and how your health has been in general over the past few weeks. Please answer ALL the questions simply by underlining or marking the answer which you think most nearly applies to you. Remember that we want to know about present and recent complaints not those that you had in the past. It is important that you try to answer ALL the questions. Thank you very much for your cooperation.

HAVE YOU RECENTLY

		1	2	3	4
A1	Been feeling perfectly well and in good health?	Better than usual	Same as usual	Worse than usual	Much worse than usual
A2	Been feeling in need of a good tonic?	Not at all	No more than usual	Rather more than usual	Much more than usual
A3	Been feeling run down and out of sorts?	Not at all	No more than usual	Rather more than usual	Much more than usual
A4	Felt that you are ill?	Not at all	No more than usual	Rather more than usual	Much more than usual
A5	Been getting pains in your head?	Not at all	No more than usual	Rather more than usual	Much more than usual
A6	Been getting a feeling of tightness or pressure in your head?	Not at all	No more than usual	Rather more than usual	Much more than usual
A7	Been having hot or cold spells?	Not at all	No more than usual	Rather more than usual	Much more than usual
B1	Lost much sleep over worry?	Not at all	No more than usual	Rather more than usual	Much more than usual
B2	Having difficulty in staying asleep?	Not at all	No more than usual	Rather more than usual	Much more than usual
B3	Felt constantly under strain?	Not at all	No more than usual	Rather more than usual	Much more than usual
B4	Been getting edgy and bad tempered?	Not at all	No more than usual	Rather more than usual	Much more than usual
B5	Been getting scared or panicky for not good reason?	Not at all	No more than usual	Rather more than usual	Much more than usual
B6	Found everything getting on top of you?	Not at all	No more than usual	Rather more than usual	Much more than usual
B7	Been feeling nervous and anxious?	Not at all	No more than usual	Rather more than usual	Much more than usual

HOW VULNERABLE ARE YOU TO STRESS

Instructions

Ensure that you answer all the questions honestly and as it applies to you.

1	I eat at least one hot, balanced meal a day	1	2	3	4	5
2	I get seven to eight hours of sleep at least four nights a week	1	2	3	4	5
3	I give and receive affection regularly	1	2	3	4	5
4	I have at least one relative within 50 miles, on which I can rely	1	2	3	4	5
5	I exercise to the point of perspiration at least twice a week	1	2	3	4	5
6	I limit myself to less than half a pack of cigarettes a day	1	2	3	4	5
7	I take fewer than five alcohol drinks a week	1	2	3	4	5
8	I am the appropriate weight for my height	1	2	3	4	5
9	I have an income adequate to meet basic expenses	1	2	3	4	5
10	I get strength from my religious beliefs	1	2	3	4	5
11	I regularly attend club or social activities	1	2	3	4	5
12	I have a network of friends and acquaintances	1	2	3	4	5
13	I have one or more friends to confide in about personal matters	1	2	3	4	5
14	I am in good health(including eyesight, hearing, teeth)	1	2	3	4	5
15	I am able to speak openly about my feelings when angry or worried	1	2	3	4	5
16	I have regular conversations with people I live with about domestic problems-for example, chores or money	1	2	3	4	5
17	I do something for fun at least once a week	1	2	3	4	5
18	I am able to organise my time effectively	1	2	3	4	5
19	I drink fewer than three cups of coffee (or other caffeine drinks) a day	1	2	3	4	5
20	I take some quiet time for myself during the day	1	2	3	4	5