

INTRODUCTION

First ever structured emergency service at government level began in Pakistan by the name of Punjab Emergency Service in 2005. It is the largest institution providing humanitarian emergency services in Pakistan. It initially began an ambulance service known as Rescue 1122. After the initial piloting and success of the services, Rescue 1122 services were expanded geographically to 35 districts of Punjab (Pakistan's province), and its operations were expanded to include rescue services (catering to unique and specific emergency situations such as water, confined spaces and height emergencies), disaster response teams and community safety programs (Community Safety, 2013).

As an organization, Rescue 1122 meets the international standards of emergency management as put forward by World Health Organization (WHO). Since its inception, Rescue 1122 has saved the lives of 1, 675, 247 victims of emergencies. The response time has been an average of six minutes, which is high-quality performance

consider their lives and themselves as worthless. They tend to catastrophize events taking place around them (Tanaka, Sakamoto, Kijima, & Kitmaru, 1998).

They lose interest in daily activities and fail to experience positive emotions. They do not feel like participating in pleasurable activities, which they previously enjoyed. They lose interest even in their hobbies, and develop a nonchalant attitude towards things. Irritability is also associated with depression as the individual may be persistently angry or show anger or frustration over other minor issues. Apart from blaming themselves, they may engage in excessive blaming directed outwards towards others (American Psychiatric Association, 2000).

Depression is also associated with disturbances in sleep and eating patterns. It is also associated with decrease in energy, feelings of tiredness and fatigue. The individual may also report feeling tired even after participating in activities requiring minimum amounts of effort. This may also affect the efficiency of performing day-to-day tasks and work related duties. Depression is also associated with impaired ability to concentrate, think and make decisions. Memory impairments may also result from depression. Suicidal ideations and attempts are also associated with depression. Latter is prevalent in individuals experiencing more severe form of depression (American Psychiatric Association, 2000).

Anxiety

On the other hand, anxiety is provoked when a person anticipates danger in the future (Tanaka, Sakamoto, Kijima, & Kitmaru, 1998). Anxious individuals are constantly living in the fear that something bad may happen in future. Due to this, the individuals remain shaky, afraid and on the edge. As these individuals are constantly anticipating the worst, they are found to be making attempts and trying frantically to control and stop the anticipated bad events from happening. Anxiety is also marked with autonomic arousal, which included symptoms such as dryness of mouth, palpitation, racing heartbeat, breathing difficulties and difficulty in swallowing (American Psychiatric Association, 2000).

Anxiety is characterized by constant worry about the future, and therefore results in physiological arousal, which may affect their sleep and eating habits and ability to concentrate (American Psychiatric Association, 2000). Depression and anxiety both share characteristics of experience of shame, guilt, fear and misery. It has been seen that people exhibiting symptoms of depression usually exhibit symptoms of anxiety as well (Lovibond & Lovibond, 1995).

Stress

Stress is characterized by the feelings of irritability, agitation and experiencing difficulty in relaxing. Stress is related to non-specific arousal, which is chronic in nature. Stress is symbolized by being easily frustrated and annoyed, being over-reactive and impatient. Individuals who are stressed find their lives as being overloaded and unpredictable (Lovibond & Lovibond, 1995). All in all, stress, anxiety and depression all causes impairment in occupational and social lives as well as having bad repercussions in terms of physiological health (American Psychiatric Association, 2000). This causes a decrease in productivity on the job, which may even further increase the level of stress experienced leading to distress (Horwitz, 2007; Ridner, 2004) and thus, demands attention from mental health professionals and researchers alike.

A number of factors can be stated to contribute towards psychological distress. On personal level, compassion fatigue experienced by the individuals (Adams, Boscarino, & Figley, 2006; Matheiu, 2007), their level of empathy (Larson & Yao, 2005) and their coping strategies (Eisenbarth, 2013) are worthy of discussion amongst others.

Compassion Fatigue

Compassion fatigue is a fairly novel concept. It emerged in the mid 1990's, and is found to be prevalent in individuals engaged in professions concerned with helping others. It results by focusing high amount of energy and compassion over an extended period of time without experiencing positive outcomes or improvement (Gentry,

coping strategies employed by people to deal with a stressor, which includes avoidance, emotion-focused coping and problem-focused (Lazarus & Folkman, 1984). Religious coping has also come to be known as another important type of coping (Pargament, 1997). Choice of coping strategies has a bearing on psychological distress and compassion fatigue - that is vicarious trauma and burnout - as experienced by individuals. For instance, active distractive coping (emotion focused coping) has been found to be positively correlated with PTSD (Clohessy & Ehler, 1999) while avoidance focused coping has been reported to be positively correlated to burnout (Schaufeli & Enzmann, 1998; Storm & Rothmann, 2003; Jaracz, Górna, Konieczna, 2005). Moreover, avoidance coping was stated to lead towards psychological distress particularly when the level of emotion focused and practical coping was low (Eisenbarth, 2013). Eisenbarth also concluded emotion focused coping to be adaptive in contradiction to the studies mentioned above. The present aimed to identify the coping styles predictive of distress in rescue workers among other objectives as mentioned below.

OBJECTIVES

to fill out the questionnaires on the average. As the participants of this study were rescue workers, they, at times, had to leave on emergencies without completing the forms. They would complete their forms upon returning back from the assigned duty or the next day.

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the Burnout subscale, 0.80 for the Secondary Trauma subscale, and 0.90 for the combined scale. In addition, Adams et al. (2006) give persuasive evidence for factor, concurrent and predictive validity of the Compassion Fatigue Short Scale. Permission for its use and translation was attained. For the present study, Cronbach Alpha for overall scale was 0.89 while for the subscales of burnout and vicarious trauma; it was 0.85 and 0.75 respectively.

Depression Anxiety Stress Scales (DASS)

DASS was used to evaluate the level of psychological distress in Rescue 1122 workers. DASS was developed by P. F. Lovibond and S. H. Lovibond in 1993 containing three scales that are depression, anxiety and stress. The scale consists of 42 items in total. Each scale consists of 14 items each. Depression has a correlation of 0.74 with Beck Depression Inventory and 0.81 with Beck Anxiety Inventory (Lovibond & Lovibond, 1995). It has an internal consistency of 0.89 for depression and 0.947 for anxiety scale (Crawford & Henry, 2003). In the present study, Cronbach Alpha for the overall scale was 0.97. It was 0.91, 0.91 and 0.95 for the subscales of depression, anxiety and stress respectively.

Demographic Information Questionnaire

In order to attain general information, a demographical questionnaire was formulated. It consisted of questions regarding age, education, marital status, no of children, no of dependents, housing (living with the family or living away from the family), total income per year, department, number of years in service, nature of shift, change in the life in the past one year etc. The participants were asked about the exposure to trauma before entering services such as sexual abuse, physical abuse, verbal abuse, accident and terrorist attack. In addition, a list of critical events was included in the questionnaire to assess the frequency of exposure to them during service. The events included: death of a patient, line-of-duty death of a mate, violence against self, violence against others, near-death experiences, death of a child and multiple casualties (Regehr, Hill, Knott, & Sault, 2003). The perceived level of social support from family and friends, workmates and administration was measured on a rating scale consisting of 10 points. Participants satisfaction with their job was also measured on a 3-pointg scale (0 = Not satisfied, 1 = Satisfied to some extent, 2 = Satisfied). Amongst the above-mentioned factors, the ones having significant correlation with psychological distress as indexed by depression, anxiety and stress were concluded as the co-variates in the study, and therefore, later controlled for in the regression analysis phase as they may have diluted the relationship between the variables of interest in the study.

PROCEDURE

Firstly, permission letter to collect data from Rescue 1122 was acquired from Centre for Clinical Psychology, University of the Punjab, Lahore. Subsequently, the Director General of Rescue 1122 was approached, and explained the purpose of the study. Following this, the study was initiated. It employed purposive sampling. The researcher was asked to collect data from four stations, and the administrations of these stations were requested for cooperation.

Individual administrations were carried out. Before a participant started to fill out the questionnaires, he was given necessary instructions in order to aid him. The participants took 25 minutes

Table 2.

Frequency and Percentages of Job Satisfaction, Perceived level of support (Family, Workmates, Rescue 1122 Administration) in Rescue 1122 Workers

Characteristics	F	%
Job satisfaction		
Yes (Score: 2)	79	52.7
To some extent (Score 1)	60	40.0
No (Score 0)	10	6.7
Missing	1	0.7
Perceived level of support (Family)		
Low	12	8.0
Average	62	41.3
High	75	50.0
Missing	1	0.7
Perceived level of support (Workmates)		
Low	11	7.3
Average	64	42.7
High	74	49.3
Missing	1	0.7
Perceived level of support (Rescue 1122 administration)		
Low	33	22.0
Average	62	41.3
High	52	34.7
Missing	3	2.0

Characteristics	f	%
Emotional Empathy		
Low (Beyond - 1 SD)	54	36
Average (Within 1 SD)	87	58.0
High (Beyond +1 SD)	9	6.0
Burnout (Compassion Fatigue)		
Low (Less than 30)	95	63.3
High (30 and above)	55	

strategies and vicarious trauma on psychological distress. The first hypothesis was that there would be relationship among emotional empathy, coping strategies, compassion fatigue and psychological distress. The findings showed several significant relationships between emotional empathy, coping strategies, compassion fatigue and psychological distress. Therefore, this hypothesis was partially accepted.

No significant relationships were found between the three factors of emotional empathy namely: tendency to be moved by others emotional experiences, emotional responsiveness and susceptibility to emotional contagion, and vicarious trauma. It may be said that in due to the unstable conditions in Pakistan, individuals come across a number of traumatic events either personally or on media. Therefore, they become used to such incidents (Wolpe, 1982). Hence, in rescue

workers, who are empathetically aroused upon witnessing traumatic incidents, their empathy may not translate into vicarious trauma, which is a higher stage of arousal (Hoffman, 2008). Moreover, the rescue workers may be too preoccupied with their own life problems, which could economics-related in nature, to experience this level of arousal.

Similarly, no significant correlations were found among the three factors of emotional empathy and burnout. An explanation could be that burnout is considered to be a resultant of factors related to institutional set up such as demanding duties, long hours, etc. (Adam, Boscarino, & Figley, 2008). Therefore, the empathetic arousal of rescue workers, when exposed to traumatic events while doing their duties, may not be related to and lead to burnout.

The findings revealed significant negative relationships between tendency to be moved by others emotional experiences and depression, anxiety and stress. In addition, there existed significant negative relationships between emotional responsiveness and depression, anxiety and stress while susceptibility to emotional contagion was negatively correlated to depression and anxiety. This is in line with previous researches, which showed an inverse relationship between depression and empathy (Thomas et al., 2007). Empathy increases the likelihood of an individual to help and motivates prosocial behavior (de Waal, 2008; McDonalds & Messinger, in press). Helping others, in turn, alleviates mood, and have a good impact on the physical and emotional well-being of individuals (Luks, 1988). In this way, empathy may reduce the chances of a person to experience psychological distress. Therefore, rescue workers experiencing empathy may be motivated to help those in need more; thereby, experiencing mood alleviation associated with pro-social behaviors.

Interestingly, it has been suggested that high levels of empathy leads towards psychological distress (Liao et al., 2002; Regehr, 2009). No evidence was this was found in this research maybe because of the fact that majority of rescue workers studied in this research exhibited low to average levels of empathy. It could be purported that empathy beyond a certain level may causes distress and within certain limits reduces distress. Further investigation needs to be done to tap into this possible non-linear relationship between emotional empathy and psychological distress in rescue workers.

In addition, avoidance focused coping was found to be significantly correlated with vicarious trauma, burnout, depression, anxiety and stress. Avoidance focused coping basically comprises of cognitive and behavioral efforts aimed towards minimizing, denying or ignoring dealing with a stressful situation (Holahan, Holahan, Moos et al., 2005). The reason for this positive relationship between avoidance focused coping, and compassion fatigue and psychological distress could be that avoidance focused coping hinders the efforts to deal practically with stressful situations. Therefore, the problem remains in the environment, and hence, the psychological distress due to the problem does not go down (O' Connor & O' Connor, 2003).

In addition, a weak positive correlation was found out between active distractive coping and anxiety, stress and overall, psychological distress. Active distractive coping response may undermine the use of strategies to counter the problem causing distress, and thus leading to psychological distress (Jaracz, Gorna, & Konieczna, 2005). Eisanberth (2013), in contrast, has found out that emotion focused coping or active distractive coping reduces the chance of psychological distress. According to Eisanberth, a single coping strategy is not a good indicator of psychological distress. Therefore, the entire coping profile (which signifies interplay among the coping strategies) needs to be taken into account with regards to psychological distress. In addition, the reliability for the scale of active distractive coping was low. Hence, caution must be exercised in drawing solid conclusions.

Note: TMEE: Tendency to be Moved by Other's Emotional Experiences; ER: Emotional Responsiveness; SEC: Susceptibility to Emotional Contagion; TES: Total Empathy Score; AFC: Active Focused Coping; ADC: Active Distractive Coping; AVFC: Avoidance Focused Coping ; RFC: Religious Focused Coping; VT: Vicarious Trauma; B=

The final hypothesis was related to measuring the predictive effect of emotional empathy, coping strategies and compassion fatigue on the three components of psychological distress that is depression, anxiety and stress. Results confirmed the hypothesis. The results exhibited that emotional empathy, coping strategies and compassion fatigue explain significant variance in depression, anxiety and stress after making allowances for exposure to traumatic events before joining Rescue 1122, perceived level of support from family and workmates and satisfaction with job.

The results showed that rescue workers who are moved by other's emotional experiences that is negative or positive experiences are less at risk of psychological distress indexed by depression, anxiety and stress. Individuals, who engage in helping behaviors - motivated by empathetic tendencies - experience helper's high, which is a positive emotion, and it decreases distress (Luks, 1988; Post, 2009). Therefore, rescue workers, who were touched by other people's emotional experiences, may have experienced a relief in their distress by helping them that is they may have experienced helper's high.

It was also found out in the present study that Rescue 1122 workers who use avoidance coping strategies that is they turn away from problems and try to suppress and ignore them are also at an increased risk of developing psychological distress. That is individuals who are engaging in avoidance focused coping are likely to develop symptoms of depression, anxiety and stress. Eisenberth (2013) and Clohessy and Ehler (1999) have similarly shown a relationship between avoidance focused coping and psychological distress. The reason could be that this type of coping does not allow for healthy resolution of the distress-inducing problems and lead to further distress.

The findings also highlighted that active focused coping was a negative predictor of anxiety. The more an individual engages in the active focused, also known as problem focused coping, the less their anxiety was. Active focused coping deals with finding practical solutions to the problem(s) causing distress. Hence, its employment leads in the reduction of anxiety as the constructive steps are taken to deal with the actual problem(s) (Rice, 1999; Collins, 2007).

Burnout was found to predict symptoms of stress. Burnout has been shown to lead to feelings of cynicism and discouragement

(Bensen & Magraith, 2005), which could cause a person to feel stressed or add to their stress. Results showed that burnout did not predict depression and anxiety. There has been a debate about the link between depression and burnout. Some researchers purported that depression could be a result of burnout (Papovic, 2009; Figley, 1995). However, the present research did not support this.

Apart from the above mentioned variables, demographic characteristics such as exposure to traumatic events before joining the service was found as a predictor of depression, anxiety and stress. Previous researches have also shown that exposure to traumatic events of personal nature leads to psychological distress as personal traumatic events leave a lasting impact (Evans et al., 2002; Thomas, 2013). Perceived level of support from workmates was also a significant predictor of depression, anxiety and stress. Results signified that the perceived level of support from workmates was positively associated with depression, anxiety and stress.

This may seem counter-intuitive as such as high perception of social support has been linked with psychological well-being. One explanation for this could be that Rescue 1122 workers spend most of their time with their workmates. This, on one hand, helps them form bonds with each other. However, this could also weaken bond with family causing rifts leading to psychological distress. In addition, spending so much with each other as it may also reinforce negative qualities and coping styles such as emotional numbing and avoidance coping in each other, which may further cause damage in intimate relationships leading to distress (Regehr, 2009) Also, distress may precede increase in social support from workmates. Rescue workers may increase the amount of support given to workmates who appear to be distressed. Having discussed the results; the next section details upon the limitations of the present study and the implications of the results.

LIMITATIONS AND SUGGESTIONS

- Social support was found to be an important predictor of psychological distress. Perception of social support was, however, measured using a single question. Future researches should study social support in depth to ascertain the link between social support and psychological distress. In addition, longitudinal studies need to be undertaken to draw inferences about causation.

- Some of the participants left the questionnaires incomplete because they had to go on emergencies. They later completed the questionnaires. This may have affected their responses. Therefore, the results of the study need to be viewed with caution.
- Research needs to be done on the families of Rescue 1122

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