

# Trait Emotional Intelligence, Secondary Trauma Self-Efficacy, and **Compassion Fatigue among Doctors**

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#### ABSTRACT

Doctors working in the emergency departments of hospitals are persistently exposed to high levels of secondary trauma, which can lead to compassion fatigue. This research aimed to identify the relationship between emotional intelligence, secondary trauma self-efficacy, and compassion fatigue among physicians working in emergency departments of Pakistani hospitals. The research design was correlational, and a purposive sampling strategy was employed to collect online data. The results indicate a positive relationship between trait emotional intelligence and secondary traumatic self-efficacy while the relationship between trait emotional intelligence and compassion fatigue is negative. Secondary trauma self-efficacy tends to partially mediate the relationship between emotional intelligence and compassion fatigue in doctors, with women showing more compassion fatigue. The study recommends that healthcare leadership and policymakers conduct educational programs and counseling for emergency department doctors, especially women doctors, to enhance their emotional intelligence and selfefficacy and combat compassion fatigue.

Keywords: Trait Emotional Intelligence, Secondary Trauma Self-efficacy, Compassion fatigue, COVID-19 effects, Emergency departments, Doctors

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# **INTRODUCTION**

Healthcare environments, especially emergency departments of hospitals, that involve enormous exposure to human suffering, are one of the most stress-evoking and emotionally difficult places to work (Barleycorn, 2024). Due to this, healthcare providers in emergency departments, especially doctors, suffer from a lot of stress and role burden (McCormick et al., 2023). Despite working in stressful situations, doctors are expected to be altruistic, caring, and compassionate (Milton et al., 2023). Patients and general members of the public evaluate the quality of services provided by doctors based on provider compassion and empathetic attitudes (Walsh et al., 2019). Such high expectations among consumers of health services may not be met due to the increasing workloads and fatigue of healthcare providers (Fekonja et al., 2023). The constant demand for empathy and compassion is known to lead to spiritual, emotional, and physical exhaustion especially in doctors serving in emergency departments (Intonato, 2020).

Persistent exposure to a patient's trauma and being affected by the patient's suffering, also known as secondary trauma, could lead to potentially negative consequences for a doctor's emotional and physiological health and consequently affect the quality of services for the patients (Lee et al., 2018). Deep-seated emotional experiences in health care professionals often result in compassion fatigue, which ultimately affects their ability to show compassion towards others (Bush, 2009).

Emotional intelligence has been studied as a significant predictor of compassion fatigue. Maqbool and Nazir (2014) argued based on their research that emotional intelligence was strongly linked with compassion fatigue. Lin and colleagues (2016) have also highlighted that there is a substantial predictive association between a person's level of emotional intelligence and the experience of compassion fatigue. Additionally, studies have revealed a strong negative correlation between compassion fatigue and emotional intelligence (Kim, 2019). Self-efficacy has also been found to be an important predictor of compassion fatigue. Burgess (2018) demonstrated how common burnout and compassion fatigue were among

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healthcare professionals in emergency wards. The findings showed that burnout and compassion fatigue were inversely correlated with empathy and coping self-efficacy.

#### **Trait Emotional Intelligence**

Petrides (2010) has defined trait emotional intelligence as a cluster of a person's characteristic features related to temperament and personality disposition, which incorporates the emotive aspects of a person's identity. Another important point to consider - is that doctors have to manage their patient's emotions and their own. This becomes significant when the patients are in critical and traumatic situations or cases when patients will die despite the best efforts of doctors. Therefore, emotional intelligence (i.e. adaptability, emotion regulation, emotion management, etc.) is of keen importance in the daily experiences of doctors. Studies have concluded that emotional intelligence in healthcare professionals plays an active role in achieving proper patient-centered care (McQueen, 2004). Researchers have also indicated that emotional intelligence is positively related to better problem-solving skills, lower rates of anxiety, and lesser work-related stress (Poret et al., 2010).

Trait emotional intelligence has also been found to have an association with reduced perceived stress, burnout, and emotional exhaustion in doctors (Swami et al., 2013). The mediation function of self-efficacy between trait emotional intelligence and students' assessment or anticipation of stressful circumstances was investigated by Mikolajczak and colleagues (2007). According to the study's findings, trait emotional intelligence levels are positively associated with self-efficacy when coping with stressful situations. The predictive power of coping self-efficacy in relation to emotional regulation was investigated by Bryan et al. (2014). The results indicated that the links between mindfulness and problems with emotion regulation are partially mediated by coping self-efficacy.

#### Secondary Trauma Self-Efficacy

As emphasized by Benight and Bandura's (2004) social cognitive theory, self-efficacy should be elaborated and explained in accordance with the unique circumstances. Doctors in emergency departments of hospitals are frequently exposed to traumatic and adverse experiences of others such as death, traumatic injuries, and the suffering of patients. This puts them at higher risk for secondary trauma. In settings involving exposure to secondary trauma, self-efficacy has been found to be associated with reduced levels of compassion fatigue (Ortlepp & Friedman, 2002). Self-efficacy is a significant predictor of determining compassion fatigue among healthcare professionals who are exposed to secondary trauma (Kabunga et al., 2019). Other studies have found that improving self-efficacy can work as a great intervention for dealing with compassion fatigue (Bao & Taliaferro, 2015; Cicognani et al., 2009).

#### **Compassion Fatigue**

The term compassion fatigue is usually described as a reduction or a decrease in a person's capacity or potential of being compassionate and empathetic or "endure the sufferings of a client" and is an intrinsic consequential behavior or emotion resulting from secondary exposure to traumatic events experienced by other people (Adams, 2008). Thus, compassion fatigue is discussed in contexts where the work involves dealing with people who have gone through distressing events (Henson, 2017). Boyle (2011) reported that if left unattended, compassion fatigue may result in health care provider's permanent inability to be compassionate towards others. According to Figley (2002), the variable of compassion fatigue is comprised of two key sub-factors. The first factor is job burnout while the second factor is secondary trauma.

The phenomenon of burnout has been traditionally engrained in the relational factors of the job. It involves the association between the healthcare provider and client and how much is demanded from the provider in terms of hours and extent of services (Maslach et al., 2001). Secondary trauma refers to the phenomenon by which a person becomes traumatized by an indirect experience of traumatic events e.g. by hearing about someone's experiences of trauma. Doctors working in emergency departments are usually at high risk of developing compassion fatigue. Researchers have reported a significantly increased intensity of experiencing compassion fatigue among healthcare professionals (Ghazanfar et al., 2018). Ghazanfar and colleagues (2018) found through a cross-sectional research study that cardiac doctors under 40 years of age had greater degrees of secondary traumatic stress and burnout. Another study conducted in Pakistan revealed a positive correlation between compassion fatigue and two demographic variables: age and experience (Mohsin, 2018).

Research conducted by Mooney and colleagues (2017) highlighted that female healthcare professionals are more prone to experience compassion fatigue compared to their male colleagues. This is also supported by other research which reports that female doctors experience high levels of emotional empathy which leads to increased compassion fatigue (Wu et al., 2017). However, there is relatively little body of research that explains how emotional intelligence and secondary trauma self-efficacy relate to the likelihood of compassion fatigue in doctors working in emergency wards of hospitals.

## Aim of Study

This research was designed to assess the relationship between trait emotional intelligence, secondary trauma self-efficacy, and compassion fatigue. The following hypotheses were made in this study:

H1. Secondary trauma self-efficacy acts as a mediator between trait emotional intelligence (and its sub-factors) and compassion fatigue (and its sub-factors).

H2. Trait emotional intelligence, secondary trauma self-efficacy, and compassion fatigue are likely to differ in male and female doctors.

## METHODOLOGY

#### **Research Design, Ethics, and Sampling Strategy**

The study was approved by the Institutional Research Committee at the Center for Clinical Psychology, University of the Punjab, Lahore, Pakistan. Permission for using scales was taken from the respective authors of the scales. Informed consent was taken from participants and information was provided about the purpose of the research. Data analysis and reporting of results were conducted using ethical standards.

# Sample and Data Collection

G\* power analysis was employed to determine the appropriate sample size for this study. The analysis indicated a sample size of 115 would be significant. Only those participants who performed duty hours in emergency departments and had experience of at least one year working in the emergency department were part of the selection criterion. Data was collected online from March 2021 to May 2021, by creating Google Forms, due to the COVID-19 pandemic and lockdown. The final sample consisted of 108 participants:57 male and 51 female doctors aged 24-60 (M= 28.9, SD=6.9).

## Measures

## Demographic Data

A demographic form was used to gather data related to research participants. Questions such as gender, age, and years of work experience were included.

# Trait Emotional Intelligence Scale

To assess the level of trait emotional intelligence of research participants, a short version of the Trait Emotional Intelligence Scale was used in this study (Petrides, 2010). It is a 30-item scale. It measures four factors in terms of 15 facets of emotional intelligence. The first factor on this scale was well-being, which was found to have a reliability value of .69, while the second factor was self-control, which had a reliability value of .67. Moreover, the third and fourth subscales were emotionality and sociability which were found to have reliability values of .72 and .56 respectively.

# Secondary Trauma Self-Efficacy Scale

The Secondary Trauma Self-Efficacy Scale measures a person's ability to deal with secondary trauma (Cieslak et al., 2013). It consists of seven items that are aimed to determine a person's skill deal with trauma-induced when a person deals with people who have undergone trauma. This scale consists of seven items. A points Likert scale is used to mark these items. The

reliability analysis indicated that Cronbach's alpha value for this scale was .89 which can be considered quite high.

#### **Compassion Fatigue Scale**

The Compassion Fatigue Short Scale includes 13 items (Adams, 2008). It comprises of two subscales i.e., burnout and secondary trauma subscale. The subscale for burnout consists of eight items that determine the level of job burnout in a person. The secondary trauma subscale is comprised of five items that measure the symptoms of secondary traumatic stress. A tenpoint Likert scale was used in this scale. The alpha reliability values of this scale and its subscales were quite high which were found to be .93, .86, and .91 for the compassion fatigue scale, secondary trauma subscale, and job burnout subscale respectively.

#### Data Analysis

The Statistical Package for Social Sciences (SPSS) version 22.0 was used for data analysis. First, the reliability analysis was done to test the reliability of scales and subscales. Next, mediation analysis was done to assess the relationship between study variables in two steps-(i) the mediation of secondary trauma self-efficacy between trait emotional intelligence and compassion fatigue, and (ii) the mediation of secondary trauma self-efficacy between subscales of trait emotional intelligence and subscales of compassion fatigue (secondary trauma and job burnout). Mediation analysis was done by keeping covariates i.e., gender, years of experience, satisfaction with salary and working hours, relationships with family members, head or authority members, and work colleagues in control. Last, an independent sample t-test was conducted to examine the gender differences in trait emotional intelligence, secondary trauma self-efficacy, and compassion fatigue.

The Cronbach alpha values of trait emotional intelligence, secondary trauma selfefficacy scale, and scale of compassion fatigue were high i.e., 0.89, 0.89, and 0.93 respectively, indicating that the scales were highly reliable and that the items had high internal consistency (Table 1).

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Scales	K	М	SD	Cronbach Alpha	Range		Skew
				- inpitu	Potential	Actual	
Trait Emotional Intelligence	30	4.64	0.91	.89	1-7	2.07-7	.07
Well-being	6	4.98	1.12	.69	1-7	1.5-7	54
Self-control	6	4.43	1.15	.67	1-7	1.5-7	24
Emotionality	8	4.54	1.10	.72	1-7	2.25-7	.11
Sociability	6	4.47	.99	.56	1-7	1-7	.09
Secondary Trauma Self-efficacy	7	35.51	7.67	.89	7-49	11-49	81
Compassion Fatigue	13	58.25	28.43	.93	13-130	13-123	.14
Secondary Trauma	5	22.11	11.33	.86	5-50	5-45	.12
Job Burnout	8	36.13	18.34	.91	8-80	8-78	.25

 Table 1

 Psychometric Properties of Study Instruments (n= 108)

Note: A= reliability value, k= no. of scale items, SD= standard deviation and M= mean

#### RESULTS

Table 2 shows the results of hierarchical regression analysis. The first analysis was conducted in two steps. In step 1, the model was found to be significant with control variables (F (7,100) = 2.74, p= .01) and predicted 16% variance in secondary trauma self-efficacy ( $\Delta R^2$ = .16). In the second step, emotional intelligence was added, which significantly predicted secondary trauma self-efficacy (F (8,99) = 11.04, p< .001) and explained 31% variance ( $\Delta R^2$ = .31). In the second analysis, the trait emotional intelligence was considered as a predictor, while secondary trauma self-efficacy was considered as a mediator and compassion fatigue as the outcome variable. In Model 1, control variables were added as predictors, and compassion fatigue as the outcome. Only gender was a significant predictor of compassion fatigue.

Overall, the significance of the model was (F (7,100) = 3.28, p= .003) and it predicted an 18% variation in compassion fatigue ( $\Delta R^2$ = .18). In model 2, trait emotional intelligence was added which significantly predicted compassion fatigue i.e. *B*= -.51 (F (8,99) = 8.16, p<.001) and explained 21% variance in compassion fatigue ( $\Delta R^2$ = .18). In model 3, secondary trauma self-efficacy was added which significantly predicted compassion fatigue ( $\Delta R^2$ = .18). In model 3, secondary trauma self-efficacy was added which significantly predicted compassion fatigue (F (9,98) = 8.09, p< .001) and it explained 2% variance in compassion fatigue ( $\Delta R^2$ = .02). This reduction in strength of the effect of TEI on compassion fatigue in the presence of mediator (secondary trauma self-

efficacy) (from B= -.51 to B= -.36) supported the hypothesis that secondary trauma selfefficacy partially mediated the association in trait emotional intelligence and compassion fatigue. We found that secondary trauma self-efficacy acts as a partial mediator between trait emotional intelligence and compassion fatigue (Figure 1).

#### Table 2

Mediation through Hierarchal Analysis taking Trait Emotional Intelligence as Predictor, Secondary Trauma Self-Efficacy as Mediator and Compassion Fatigue as the Outcome Variable (n=108)

Predictors	$\Delta \mathbf{R}^2$	В
Analysis 1		
Step 1	.16**	
Control variables*		
Step 2	.31***	
Trait Emotional Intelligence		.62***
Total R <sup>2</sup>	.47***	
Analysis 2		
Model 1	.19**	
Control variables*		
Model 2	.21***	
Trait Emotional Intelligence		51***
Model 3	.03*	
Secondary Trauma Self efficacy		23*
Total R <sup>2</sup>	.43***	

Note. Control variables include gender, years of experience, satisfaction with salary and working hours and

relationship with family, colleagues and head of department. \*p<.05, \*\*p<.01, \*\*\*p<.001.

#### Figure 1

Mediation of Secondary Trauma Self-Efficacy between Trait Emotional Intelligence and Compassion Fatigue



Two detailed mediation analysis were conducted to analyze the mediational role of secondary trauma self-efficacy between the sub factors of trait emotional intelligence and compassion fatigue. Table 3 shows the results of mediation analysis, in which the wellbeing, self-control, 9

emotionality and sociability (sub-factors of trait emotional intelligence) were considered as predictors, and secondary trauma (sub-factor of compassion fatigue) was considered as the outcome. The first model with control variables was found to be significant (F (7,100) = 3.15, p= .005) and it determined 18 % variation in secondary trauma. In model 2, the subscales of trait emotional intelligence were added. Only sociability was a significant determinant (F (11,96) = 5.10, p < .001) and it determined 18 % variance in secondary trauma.

In model 3, secondary trauma self-efficacy was established as a significant predictor (F (12,95) = 5.91, p < .001). Moreover, decrease in strength of beta coefficient of model 2 and 3 (from -.35 to -.27) indicated that secondary trauma self-efficacy works as a partial mediator between wellbeing, self-control, emotionality and sociability (predictors) and secondary trauma (outcome). These results indicate that secondary trauma self-efficacy acts as a partial mediator between well-being, self-control, emotionality, and sociability (subscales of trait emotional intelligence) and secondary trauma (sub-factor of compassion fatigue) as presented in Figure 2.

Table 3

Mediation through Hierarchal Analysis well-being, Self-Control, Emotionality and Sociability as Predictors, Secondary Trauma Self — Efficacy as a Mediator, and Secondary Trauma as Outcome

Predictors	$\Delta \mathbf{R}^2$	В
Analysis 1		
Step 1	.16*	
Control variables		
Step 2	.30***	
Wellbeing		.16
Self-control		.16
Emotionality		.17
Sociability		.32*
Total R <sup>2</sup>	.46***	
Analysis 2		
Model 1	.18**	
Control variables		
Model 2	.19***	
Well being		.003
Self-control		007
Emotionality		18
Sociability		35**
Model 3	.06**	
Secondary Trauma Self-efficacy		33**
R <sup>2</sup>	.43***	

*Note.* Control variables include gender, years of experience, satisfaction with salary and working hours, and relationship with family, colleagues, and head of department. \*p<.05, \*\*p<.01, \*\*\*p<.001.

#### Figure 2

Partial Mediational Effect of Secondary Trauma Self Efficacy between Well-being, Self-Control, Emotionality and Sociability (Predictors) and Secondary Trauma (Outcome)



Table 4 shows a detailed mediation analysis with subscales of trait emotional intelligence as predictors, secondary trauma self-efficacy as a mediator, and job burnout (subscale of compassion fatigue) as the outcome. Only sociability was a significant predictor of job burnout while overall the results were significant (F (11,96) = 6.84, p<.001) and explained 25 % variance in job burnout. The third model was also found to be of statistical significance in predicting variation (F (12,95) = 6.49, p<.001), which indicates partial mediation of secondary trauma self-efficacy. The results show that secondary trauma self-efficacy acts as a partial mediator between well-being, self-control, emotionality, sociability (predictors), and job burnout (outcome) as presented in Figure 3.

## Table 4

Predictors	$\Delta \mathbf{R}^2$	В
Analysis 1		
Step 1	.16*	
Control variables		
Step 2	.30***	
Wellbeing		.16
Self-control		.16
Emotionality		.17
Sociability		.32*
Total R <sup>2</sup>	.46***	
Analysis 2		
Model 1	.18**	
Control variables*		
Model 2	.26***	
Well being		03
Self-control		17
Emotionality		01
Sociability		39***
Self-control		17
Model 3	.01	
Secondary Trauma Self efficacy		14
Total R <sup>2</sup>	.45***	
Secondary Trauma Self efficacy		14

Hierarchal Regression Analysis for Mediation with Well Being, Self-Control, Emotionality, and Sociability as Predictors, Secondary Trauma Self Efficacy as Mediator and Job Burnout as Outcome.

Note. Control variables include gender, years of experience, satisfaction with salary and working hours, and

relationship with family, colleagues, and head of department. \**p*<.05, \*\**p*<.01, \*\*\**p*<.001.

#### Figure 3

Partial Mediation Effect of Secondary Trauma Self Efficacy between Well-Being, Self-Control, Emotionality and Sociability and Job Burnout



Table 5 shows the results of independent t-test analysis which was conducted to examine gender differences in the study variables. The results indicated that female doctors (M=65.67, SD=26.81) had higher levels of compassion fatigue than male doctors (M=51.61, SD=28.42), t(106)= -2.63, p=.0. Moreover, female doctors significantly had higher levels of secondary trauma than male doctors i.e. t(106)= -2.91, p= .004. While levels of job burnout were also significantly higher in female doctors than male doctors i.e., t(106)= -2.28, p= .025. There were no significant gender differences in values of trait emotional intelligence and Secondary Trauma self-efficacy

Variables	Men		Women		Т	р	95% CI		Cohen's
	Mean	SD	Mean	SD	_		LL	UL	_ D
TEI	4.76	.92	4.50	.88	1.49	.14	086	.60	0.29
WB	5.03	1.21	4.92	1.03	.49	.62	32	.54	0.09
SC	4.56	1.06	4.28	1.22	1.27	.20	15	.72	0.24
E	4.62	1.20	4.45	0.97	.82	.41	25	.59	0.15
S	4.59	1.06	4.32	.88	1.46	.14	09	.65	0.28
STSE	36.39	8.29	34.53	6.90	1.26	.21	-1.07	4.78	0.24
CF	51.61	28.42	65.67	26.81	-2.63	.010	-24.63	-3.47	0.50
ST	19.21	11.44	25.35	10.36	-2.91	.004	-10.32	-1.96	0.56
JB	32.40	18.34	40.31	17.57	-2.28	.025	-14.78	-1.03	0.44

 Table 5

 Independent Sample T-Test Analysis

*Note:* TEI= trait emotional intelligence; WB=Wellbeing; SC=self-control; E=emotionality; S=sociability; STSE=secondary trauma self-efficacy; CF=Compassion fatigue; JB=job burnout and ST=secondary trauma

## DISCUSSION

The current research study was focused on evaluating the association among trait emotional intelligence, secondary trauma self-efficacy, and compassion fatigue in doctors working in emergency departments of Pakistani hospitals. The results of the analyses indicated that secondary trauma self-efficacy is a partial mediator between trait emotional intelligence and compassion fatigue. The main hypothesis of the study was that secondary trauma self-efficacy acts as a mediator in the association between emotional intelligence and compassion fatigue. Our findings support this hypothesis, confirming that when a person has a higher level of trait 13

emotional intelligence, they tend to have an increased awareness about their abilities to deal with traumatic stress and thus will have a lower level of compassion fatigue (Bryan et al., 2014).

Two sub-hypotheses tested the detailed mediation of secondary trauma self-efficacy between trait emotional intelligence and compassion fatigue. The first sub-hypothesis was that secondary trauma self-efficacy will mediate the relationship between well-being, self-control, emotionality, and sociability (i.e. sub-factors of trait emotional intelligence) and secondary trauma (first factor of compassion fatigue). The results indicated that the overall model of mediation was significant, but only that sociability significantly predicted secondary trauma (subscale of compassion fatigue). The second sub-hypothesis was that secondary trauma selfefficacy will mediate the relationship between well-being, self-control, emotionality, and sociability (i.e. sub-factors of trait emotional intelligence) and job burnout (second factor of compassion fatigue). The results showed that only sociability was a significant predictor of job burnout.

According to Petrides (2010), sociability is the person's ability to effectively communicate one's own emotions in social situations without anxiety and manage others' emotions to achieve desired consequences. Therefore, higher sociability can help healthcare professionals manage their emotions in the workplace and cooperate with colleagues in a better way, and thus harmonize easily in the workplace environment (Oktug, 2013). In this way, if doctors have a higher level of sociability, they are likely to have reduced levels of secondary traumatic stress reactions and burnout symptoms.

Lastly, it was hypothesized that compassion fatigue was likely to differ in male and female doctors. We found that female doctors tend to have higher levels of compassion fatigue as compared to male doctors which could be due to the reason that women tend to empathize more than men which contributes to emotional exhaustion and thus a higher risk of secondary trauma (Gleichgerrcht & Decety, 2013). Moreover, female working doctors had to manage

households along with their jobs which adds to work-family conflicts and thus job burnout and compassion fatigue (Powell & Greenhaus, 2010).

However, the results established that there were no substantial differences in trait emotional intelligence and secondary trauma self-efficacy between male and female doctors. Although the previous literature showed mixed results about levels of emotional intelligence between male and female professionals, where Fernández and his colleagues (2020) demonstrated that women scored higher on scales of emotional intelligence, Santhosh and Basha (2022) found that male doctors had higher emotional intelligence than female doctors. Moreover, Burger and colleagues (2010) found that females tend to have higher self-efficacy. Since the study was conducted during the COVID-19 lockdown, the stressful situations might have impacted the emotional intelligence and self-efficacy of both male and female doctors as they were under enormous psychological distress (Wang et al., 2020), which may be why no significant differences between the genders were found.

# Limitations

Due to lockdown and limited access to the sample population, the sample size used in this research was less than the size generated through g power analysis. Furthermore, since the research was carried out during the COVID-19 pandemic, the doctors were already stressed due to workloads and duty at quarantine centers. This could have affected the results; therefore, it is recommended that researchers repeat this investigation. Moreover, further studies should also focus on gender differences in compassion fatigue.

## **CONCLUDING RECOMMENDATIONS**

This research highlighted a significant issue of compassion fatigue predominantly faced by doctors working in emergency departments of Pakistani hospitals. Without early detection and treatment, the healthcare workers may become permanently incapable of providing optimal services and exhibiting empathy for others (Boyle, 2011). This study highlighted important predictors of compassion fatigue i.e., trait emotional intelligence and secondary trauma self-

efficacy. Moreover, it also indicated the mediational pathway for understanding these variables and their mechanism.

The findings highlight the role of healthcare leadership and mental health workers in adopting suitable strategies for assisting doctors in handling the problems of compassion fatigue. Solution-focused interventions are needed to resolve issues of compassion fatigue faced by doctors (Bush, 2009). Firstly, healthcare authorities should arrange awareness campaigns and workshops to increase self-awareness among doctors. Secondly, they should make suitable arrangements to provide the necessary counseling to emergency department staff for managing symptoms of compassion fatigue. Lastly, counselors and psychologists must incorporate strategies to improve the emotional intelligence and self-efficacy of doctors which can work as protective factors for dealing with compassion fatigue. Considering higher levels of compassion fatigue in female doctors, it is recommended that the healthcare administration should focus on integrating more women-centered policies. Apart from counseling services, female doctors must be offered other support services like flexible timings, childcare, and a balanced workload.

# **DECLARATION STATEMENTS**

#### **Ethical Approvals**

The study was approved by the Institutional Research Committee at the Center for Clinical Psychology, University of the Punjab, Lahore, Pakistan. **Conflicts of interest** The authors of the study have no conflict of interest related to research. **Informed consent** The participants of the research were provided with a consent form and they were included after they agreed with research participation. **Funding** There was no funding associated with this study. **Data availability statement** Data will be provided upon request.

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