

# Stress Coping Strategies adopted by Doctors: A Review

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## ABSTRACT

The objective of this paper is to present a review of the stress coping strategies adopted by doctors, as reported in the existing empirical studies and to suggest practical and effective stress management strategies such as Medical Humanities, Yoga and training in Emotional Intelligence to doctors to manage stress. Doctors face challenges in the form of high intensity of demands, time pressure, insufficient resources, competition, non-co-operative colleagues and supporting staff, medico-legal threats, unreasonable expectations of patients, emotional patients, poor remuneration compared to their efforts, need for continuous professional development, after-hours, on-call duty schedules, hostile work environment, ineffective work relationships and work-life imbalances. One such important issue is “Stress”. Extensive researches have been conducted world-over to assess the prevalence of stress among doctors, identify the levels of stress experienced by them, the stressors that cause stress, the job satisfaction of doctors about their perceived stress, etc. Studies suggest that stress is very much prevalent among the medical students right from the first year of their medical education and continues after that throughout their careers. However, very limited literature is available on the stress coping strategies adopted by doctors. Hence, the documentation of the available literature on stress coping strategies adopted by doctors currently and the suggestions for practical strategies that can be adopted in future as given in this paper may help doctors in managing stress and ensuring their physical and emotional wellbeing.

**Keywords:** stress, doctors, coping strategies, medical humanities, yoga

## INTRODUCTION

Doctors face challenges in the form of high intensity of demands, time pressure, insufficient resources, competition, non-co-operative colleagues and supporting staff, medico-legal threats, unreasonable expectations of patients, emotional patients, poor remuneration compared to their efforts, need for continuous professional development, after-hours, on-call duty schedules, hostile work environment, ineffective work relationships and work-life imbalances. Doctors are prone to be affected by work-related health and psychological issues. The commitment and involvement required in the medical profession are of such high priority that doctors need to be beyond any compromises. The extraordinary expectations of the patients and the demanding nature of the profession make doctors susceptible to more of work-related physical or psychological illness. One such important issue is “Stress”. Extensive researches have been conducted world-over to assess the prevalence of stress among doctors, identify the levels of stress experienced by them, the stressors that cause stress, the job satisfaction of doctors about their perceived stress, etc. Studies suggest that stress is very much prevalent among the medical students right from the first year of their medical education and continues after that throughout their careers.

Stress is defined as the body's nonspecific response or reaction to demands made on it, or to the disturbing events in the environment (Rosenham DL, Seligman ME, 1989). Stress has been defined as the consequence of events that are perceived as endangering one's physical or emotional wellbeing (Selye H, 1976). Stress is one factor which may influence behaviours and health, especially when an individual faces challenges that surpass his or her coping skills (Kouvonen A et al., 2005). People experience emotional, mental and physical disturbances in their work environment. Their inability to cope up with stressors and the demanding

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or frustrating nature of work may result in various short and long-term mental, physiological, psychological or behavioural health implications (Grobler C, Hiemstra LA, 1998). Specific response of the body to all nonspecific demands is commonly called stress (Couper, 2005). An individual experiences stress when he or she is confronted with a situation which is different from the one he or she had anticipated (Robbins, 1989). Stress is thus, the physiological and psychological pressure experienced by an individual due to the disparity between the expected and the actual, that impacts the behaviour.

## METHOD

This paper reviews the existing research studies concerning stress coping strategies adopted by doctors. There is a rich repository of knowledge and empirical data-based analyses and findings in the form of books, journal publications, articles and research studies regarding the prevalence of stress among doctors, the stressors causing stress among doctors, levels of stress experienced by doctors, levels of stress experienced by doctors on the basis of their specialties and coping strategies adopted by doctors to tackle, manage or overcome stress. However, most of the studies conducted world-over focus very little on effective coping strategies. In the wake of the current challenging and dynamic scenario prevailing in the medical field, it is essential to insist upon certain experimentally proven or practically viable strategies to be made available to doctors to cope up with stress that is inherent in their jobs. Hence, this paper aims at reviewing the stress coping strategies adopted by doctors, as reported in the previous studies and further provides viable suggestions for the same.

Rahul Amte et al., (2015) conducted a cross-sectional survey to know the stress level and stressors in Indian critical care unit doctors. Questionnaires were based on GHQ-12. They were filled manually by delegates who attended the Annual Congress of Indian Society

of Critical Care Medicine. In the electronic mode, critical care doctors responded through e-mails. 242 responses were utilised for comparative and correlation analysis. Prevalence of moderate to severe stress level was 40% with a mean score of 2 on the GHQ-12 scale. Too much of responsibility at times and managing VIP patients ranked as the top two stressors studied, while the difficult relationships with colleagues and sexual harassment were the least. Substance abuse to relieve stress was reported as alcohol (21%), anxiolytic or antidepressants (18%) and smoking (14%). The authors have concluded that despite the higher workload, stress levels measured in their survey in Indian critical care doctors were lower compared to International data. The authors have suggested conducting further studies to improve the quality of lives of critical care unit doctors.

Hassan Danial Aslam et al., (2014) have reported the findings of a study aimed to determine the sources of stress among medical practitioners in private hospitals and clinics in Bahawalpur, Pakistan. The questionnaire-based field study revealed that sleep deprivation was the most important source of stress among those doctors, followed by workload, working conditions, role overload and unrealistic demands of patients. The authors opine that the results of this study will be useful to guide and reform healthcare management and policy measures.

Xiaojun Chen et al., (2013) provide an overview of research into mental health problem and occupational stress among Chinese doctors in the recent ten years. The findings reveal that doctors in general hospitals have worse mental status due to occupational stress caused by over workload, high demands from patients, occupational risk, effort-reward imbalance and fierce competition for a job promotion. Authors suggest psychiatric treatment measures that may help the Chinese doctors participating in the life-threatening major public health events to overcome the problems.

Antigonos Sochos, Alexis Bowers (2012) conducted a cross-sectional study which included 112 psychiatric and 72 general medical trainees, based in the UK to compare psychiatric and general medical trainees on

the basis of burnout, work stressors and social support. Participants completed three questionnaires on-line: Maslach Burnout Inventory, Specialist Doctors' Stress Inventory and Social Support Scale. The findings indicate that psychiatric trainees reported less burnout, fewer time demands, more consultant and emotional support but less family support than general medical trainees. The researchers concluded stating that the findings might reflect recent changes in psychiatric training in the UK.

Lee FJ et al., (2008) aimed at ascertaining the levels of stress and burnout and the strategies adopted to reduce these problems by Canadian Family Physicians. The census survey revealed that about 42.5% of the respondents had high levels of stress and burnout. The physicians resorted to valuing relationships with patients and participating in continuing medical education as stress coping strategies.

Firth-Cozens et al., (2006), state that there is a need to accept (rather than constantly rediscovering) that enough is known about the main causes of high-stress levels in doctors to address the principal organisational stressors using primary preventive interventions. They opine that providing teamwork and leadership training to clinicians would be an excellent beginning in reducing their stress. They further state that making simple changes in the organisation of work would affect stress levels dramatically.

Hawton K et al., (2004) conducted a study to investigate factors associated with suicide in doctors through the psychological autopsy study of 38 working doctors who died by suicide in England and Wales between January 1991 and December 1993. It was found that depression, substance abuse, work-related problems, relationships problems and financial problems were common among them. They self-poisoned themselves to death using drugs taken from work. The researchers concluded that strategies such as improved management of psychiatric disorder, measures to reduce occupational stress and restriction of access to means of suicide when doctors are depressed might help in prevention of suicides.

Couper (2005,2006) states that health care professionals, including doctors and nurses experience the highest levels of stress and burnout. Olkinuora et al., (2004), found out that the prevalence of stress among the general working population is around 18% and that among doctors is 28%.

Khuwaja A K et al., (2004) found out that majority of doctors of three teaching hospital in Karachi had poor satisfaction level for workplace characteristics and higher levels of job stress. They suggested further research to be carried out to explore, implement and evaluate intervention strategies for prevention of stress and improvement in job satisfaction.

Ramirez A J et al., (1996) estimated psychiatric morbidity using the 12-item General Health Questionnaire. The three components of burnout - emotional exhaustion, depersonalisation, and low personal accomplishment were assessed by administering the Maslach Burnout Inventory. Of the 1133 consultants, 882 (78%) returned the questionnaires. Radiologists reported the highest level of burnout regarding low personal accomplishment. The three sources of stress identified were, feeling overloaded, feeling poorly managed and resourced, and dealing with patients' suffering. Consultants who felt insufficiently trained in communication and management skills were experiencing burnout.

Olkinuora M et al., (1990) studied stress symptoms, burnout and suicidal thoughts in Finnish physicians using a questionnaire. 2,671 active Finnish physicians (76%) responded. Data analysis indicated that the non-specialists had higher burnout scores than specialists for both sexes. While male physicians and male managers had similar stress symptoms, female physicians had slightly less compared to female white-collar workers. The highest burnout scores in both men and women occurred in those working in municipal health centres. The lowest scores occurred in those working in private practice, universities, research institutes and public offices and organisations. Suicidal intent tended to be common in physicians than in the general population. It was also

common in female (26%) than in male (22%) physicians. Specialities such as oncology, pulmonary diseases and psychiatry were identified as higher burnout specialities. Obstetrics and gynecology, otorhinolaryngology and ophthalmology were identified as lower burnout specialities.

## **DISCUSSION**

### **Stressors of Doctors**

Personal and environmental events that cause stress are known as stressors (Lazarus RS, 1990). Stress in doctors is a product of the interaction between the demanding nature of their work and their often obsessive, conscientious and committed personalities. Hassan Danial Aslamet al., (2013) determined the sources of stress among doctors of private and public hospitals in Bahawalpur District (Pakistan). Empirical study revealed that sleep deprivation was the most important source of stress, the second was workload, the third factor was working conditions, the fourth was role overload and the last factor was unrealistic demands of patients. Moreover, workload, night shifts and relation with peers have a positive relationship with the level of stress.

The causes of stress-related and mental disorder among doctors in China include workload, highly demanding patients, occupational risks, effort-reward imbalance and highly-competitive environment for promotion (Chen et al., 2013). Long hours, dealing with critically-ill patients, emergency and night calls, sustaining medical education and personal development, and aspiring for higher goals attainment are some of the factors that make doctor's life seriously stressful (Shiwani, 2009).

Higher levels of stress were found in doctors who work in hospitals than those working in other healthcare areas such as private clinics (Lim & Pinto, 2009). According to Tyson and Pongruengphant (2004) doctors working in public hospitals reported more stress than their counterparts in the private hospitals.

Abdul Aziz (2004) had suggested that better time management might help to reduce stress among American medical doctors who were stressed due to

workload, work environment, hospital, nature of work, external environment and role conflict.

Mechteld R M et al., (2003) in their study have investigated levels of job stress and job satisfaction among medical specialists, factors contributing to stress and satisfaction and the effect of stress and satisfaction on burnout. Mail survey method was adopted for the study. Out of the 63% respondents, 55% have acknowledged high levels of stress and 81% have reported high job satisfaction. Personal and job characteristics and perceived working conditions explained the variance in job stress and satisfaction. Burnout was explained by both high stress and low satisfaction rather than by stress alone. The authors call for a focused approach to specialists' stress and satisfaction at both an organisational and a health policy level. They further provide certain suggestions such as recognising extra effort by allowing a conference visit, better administrative support and making available resources would be of great help. They insist on providing more systematic, preferably positive feedback and the creation of a work climate of social support of colleagues that would offer a safety net to the doctors.

Burbeck R et al., (2002) assessed levels of occupational stress in UK accident and emergency (A&E) consultants through a postal survey using GHQ-12 and SCL-D. They found that there were high levels of psychological distress among doctors working in A&E compared with other groups of doctors. They felt that there was likely to be an effect on staff morale and career longevity. They suggested interventions for improving the working lives of A&E consultants, reduction in hours worked, in particular.

Coomber S et al., (2002) found out through a survey that there were no significant age or sex differences between staff suffering distress or depression and those who did not among the Intensive Care Unit doctors. Three percent of the sampled doctors were bothered by suicidal thoughts. Bed allocation, being over-stretched, the effect of hours of work and stress on personal/family life, and compromising standards

when resources are short were the most stressful aspects of work.

### **Stress Symptoms**

Stress has long been a major research concept in health science since it is linked to various health outcomes and illnesses, including cancer, diabetes, cardiovascular disease, asthma, and rheumatoid arthritis (Cohen, S et al., 2007; Johnson, S et al., 2002). Doctors are facing an increased pressure which directly impacts their performance (Caplan, 1994). Physicians and surgeons complained of lower job satisfaction and abandoning of work due to stress (Anthony, 2001). Addiction and substance abuse have been found to be prevalent among depressed doctors (Bryson and Silverstein, 2008; Brooke et al., 1993). Stress can have serious implications for both the individual's health and performance. Regarding health, the relationship between stress and different serious illnesses has been scientifically established (e.g. Schleifer et al., 1983; Kiecolt-Glaser et al., 1985; Camara and Donao, 1989). Heart disease, depression, anxiety, low self-esteem, reduced job performance and burn-out are cases in point from a long list of negative outcomes of stress.

Common symptoms of stress are increased heart rate and change in breathing patterns, change in mood and thinking patterns, poor self-reported health, elevated blood pressure, depression, increased susceptibility to infection, obesity, fatigue, tension, headache, constant anxiety, regular irritability, apathy, muscle tension, asthma, irritable bowel syndrome, hypertension, constipation, dyspepsia, insomnia, back pain and other functional disorders, loss of sex drive, use of alcohol or drugs, reduced job performance, decreased job satisfaction, increased conflicts, loss of interest in work, lack of concentration, social withdrawal and suicidal intention.

### **Stress Coping Strategies adopted by Doctors**

Unattended stress will lead to catastrophic consequences both for the individual and his environment. Park and Adler (2003) reported that

appropriate coping strategies might buffer the impact of newly encountered stressful situations on mental and physical health. Situation-specific coping strategies have to be adopted to get rid of stress or at least to manage stress. According to Folkman & Lazarus (1980), coping strategies can be grouped into two general types viz., problem-focused and emotion-focused coping. Although most stressors elicit both types of coping, problem-focused coping tends to predominate when people feel that something constructive can be done, whereas emotion-focused coping tends to predominate when people feel that the stressor is something that must be endured. Due to its universality, stress is being handled in various ways. However, unless it is the right strategy, the purpose may not be served. Some of the commonly adopted or reportedly adopted stress coping strategies may be the ones which are effortless and simple such as sulking (for a short while), listening to music, taking bath, deep breathing, a cup of herbal tea, watching greenery, reading, going for a walk, self-criticism, sleeping or they may require some effort on the part of the individual which involves meditation, time management, prioritising tasks, delegating, relationship skills, self-management, getting others' support, counseling, etc.

The strategy could be optimistic coping style which may include changes in lifestyle such as balanced diet, exercise, relaxation techniques and communication which are good methods of stress prevention and release of stress. There are possibilities where an individual may be using non-productive coping strategy. Instead of voicing distress, he or she may try to suppress information about his or her situation and might use wrong methods / unhealthy ways of coping with stress, such as binge-eating, drinking too much alcohol, using drugs, procrastinating, sleeping too much, withdrawing from social network, avoidance habits like watching television for long hours, lashing out at others, ignoring the feelings and stressors.

Carver et al., (1989) and Carver (1997) have proposed 16 dimensions of coping. They include five

dimensions of problem-focused coping strategies, five emotion-focused coping strategies and six coping responses that are less useful compared to the previous ones. These coping strategies, if used effectively, may buffer the unwanted impacts of the stressful situation on physical, emotional and mental wellbeing.

The review of the previous researches on the topic indicate that doctors adopt either very simple or no coping strategies at all to manage their stress. There is the danger of the doctors resorting to negative coping strategies as revealed in the existing literature.

### **Suggestions to Doctors for coping with stress**

Sensitising doctors about the vulnerability of getting stressed and providing them with the required support is the need of the hour.

### **Medical Humanities**

Medical humanities is an interdisciplinary field of medicine which includes the application of humanities (literature, philosophy, ethics, history and religion), social science (anthropology, cultural studies, psychology, sociology, health geography) and the arts (literature, theater, film and visual arts) to medical education and practice. In addition to the intense knowledge requirement and doctoring skills, contemporary doctors need to be exposed to the various personal skills that would make their profession more rewarding and if not stress-free at least make the profession prone to a lesser degree of manageable stress. Medical humanities have been identified as a significant inclusion in the curriculum of medical education that would prepare the medical students for a known stress-laden profession ahead of them. Practising doctors also could be exposed to medical humanities as it would work well as stress-busters. For example, medical humanities include the simplest of the actions such as helping the doctors understand the different types of touch and its implications for the patients. Drama could be used to teach how a doctor could touch a patient without gender or other inhibition and make it purely professional, thus helping the doctors to shed certain

notions they may hold or help them make their patients accept and understand a touch. Listening skills could be imbibed in doctors so that they can get the whole case history of their patients from the patients themselves which would support a better diagnosis.

The benefits of medical humanities have been experimentally proven in one of the teaching hospitals in Coimbatore city, Tamil Nadu, where the theatre was used for training doctors in medical humanities. A leading theatre group conducted a workshop for about three days after which the doctors reported to have reduced stress and tension and were able to view their profession and responsibilities from an optimistic and affirmative angle. The feedback after a few months interval also was encouraging, where the doctors agreed to have learnt to tackle stress effectively and efficiently.

### **Yoga**

The benefits of Yoga are well known. From its modest beginning and acceptance in India for its inherent positive outcomes, Yoga has been accepted universally. According to Yogacharya Dr Ananda Balayogi Bhavanani, Yoga can be said to work as an integrated mind-body medicine. Yoga relaxes the body-emotion-mind complex through physical and mental techniques that enhance the pain threshold and coping ability in responding to external and internal stressors.

Psychosomatic disorders and in stress-related disorders such as diabetes, asthma, irritable bowel syndrome, epilepsy, hypertension, back pain and other functional disorders can be controlled by Yoga. Yoga understands the influence of the mind on the body as well as that of the body on the mind and this is the principle of *adhi-vyadhi* elucidated in the Yoga Vasishtha more than 5000 years ago!

The World Health Organization has recently acknowledged the significance of spiritual health by including in its definition of the "state of health". One of the important elements of Yoga is Spiritual health. Mental and physical wellbeing can be ensured by Yoga. Yoga has a rehabilitative quality that can assist

those suffering from drug and substance abuse to get back to a normal life.

Taking care of the dying and patients with incurable diseases and major disabilities are extremely stressful jobs. Yoga practice as well as its philosophy helps in healing the healers and caregivers. The dedicated practice of Yoga as a way of life is no doubt a panacea for problems related to psychosomatic, stress-related physical, emotional and mental disorders.

### Emotional Intelligence

Emotional Intelligence is of utmost importance for a both personal and professional success. Emotional Intelligence is, "the capacity to be aware of, control, and express one's emotions, and to handle interpersonal relationships judiciously and empathetically". The workplace and professional relationships of doctors are bound to be complicated. Emotional Intelligence (EQ or EI) is a term created by two researchers - Peter Salovey and John Mayer and popularised by Dan Goleman in his book 'Emotional Intelligence' published in 1996. EI is the ability to

- Recognise, understand and manage one's own emotions
- Recognise, understand and influence the emotions of others

The four components of Emotional Intelligence are Self Awareness, Self Management, Social Awareness and Relationship Management.

Learning to manage emotions that impact behaviour and people, either positively or negatively, especially when under pressure is very important. Hospitals can at times be complex and stressful environments where the interactions between the patients and doctors are of paramount importance. In such critical situations, there is a need for the doctors to be emotionally balanced and stable.

Training in Emotional Intelligence will go a long way in helping doctors create a very conducive work environment for themselves. Apart from professional relationships, it will equip the doctors to manage their personal relationships also effectively, thus

enabling them to reduce the frictions that may arise and ensure proper work-life balance.

### CONCLUSION

Review of existing research studies clearly indicates that doctors are stressed due to various stressors. It is beyond denial that doctors are under constant surveillance and pressure to perform. Several stressors stress doctors. Very few studies have been conducted to identify and report the stress coping strategies adopted by doctors. The reviews further show that doctors adopt mostly negative coping strategies or at times passive victims to stress. This paper highlights Medical Humanities, Yoga and Training in Emotional Intelligence as the three positive coping strategies that could be adopted by doctors to tackle or overcome stress.

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