

Physician Heal Thyself: Perspectives on Burnout among Doctors

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ABSTRACT

Medical professionals are passing through turbulent times. Doctors today face many challenges. Fierce competition to get into medical school and subsequently into postgraduate courses, financial burden due to high cost of medical education, keeping abreast with technological advances, pressure for specialization and super-specialization, long working hours, poor diet and recreation make doctors particularly in their formative years highly vulnerable to burnout.

This paper deals with the problem of burnout among doctors. For this review medical database such as PubMed, Scopus, and Google Scholar were searched using keywords, "burnout," "burnout syndrome," and "doctors." Besides relevant newspaper and media reports were included.

The review has brought out that burnout is an important issue among doctors. Doctors in various situations face different occupational environments predisposing to prolonged stress and burnout. In government hospitals and health centres, doctors are overworked due to high patient load and limited resources. In the private sector there is increasing corporatization leading to pressure from management to resort to questionable practices to increase profit. Doctors in teaching institutions face the stress of frequent surprise inspections. Burnout can adversely affect health and well being – in extreme cases leading to suicidal ideation. On the professional front it can lead to medical errors.

Prevention and coping skills for burnout include leadership and resilience training, stress management skills, and organizational measures. However, evidence of efficacy of most measures is modest. There is much scope for interdisciplinary research to resolve these issues.

Key words: Burnout; burnout syndrome; doctors; perspectives; determinants; coping

INTRODUCTION

In professions demanding highly specialized skills and interaction with people often there is mismatch between the human resource available vis-à-vis the workload. Medical and allied professions are increasingly facing this asymmetry. Doctors face unique situations. Public hospitals face the problem of large number of patients who throng from near

and far due to poor health facilities in peripheral areas. Doctors, nurses and other paramedical staff are overworked in government hospitals due to the sheer number of patients.¹ A few dedicated doctors and paramedical staff work round the clock on paltry salaries caring for an increasing number of patients. Overwork with poor rest and recreation can cause burnout which is an occupational hazard in these professions.

Doctors working in corporate hospitals face a different predicament. While patients are far less compared to public hospitals, the pressure to generate revenue is often high.² Doctors in private hospitals are often set targets to make maximum profit and are valued accordingly. This may drive some to unethical and unnecessary investigations and treatments. This constant pressure and lack of job satisfaction due to unprofessional practices can lead to burnout in large private corporate hospitals.

There is also crisis of medical leadership. Traditionally doctors entering private practice managed their own clinics and nursing homes. They had managerial control over their workplace as well as social connect with their peers and patients. Due to exponential increase in cost of setting up individual practices, small clinics and hospitals are being replaced by large corporate hospitals.³ Management of such institutions is complex and associated with loss of autonomy for doctors.⁴

Medicine is a noble profession. So is teaching. Burnout is high in both the professions.^{5,6} Medical teachers face the stress of both the professions making them highly vulnerable to burnout.

Aspiring doctors have their own issues. We are living in the age of "fast food" promoted by global giants such as McDonald and "crash courses," promoted by coaching classes for all types of entrance examinations. "Fast food" during early life leads to a poor nutritional foundation. "Crash courses" for aspiring doctors to enter undergraduate and postgraduate courses lay poor educational and professional foundation.⁷ These weak foundations may increase the vulnerability to burnout.

The present review article dwells on these issues. The short review deals with description of the symptom complex of burnout, the burden, determinants, impact on efficiency and

health, and methods to prevent and cope with burnout. Medical databases such as Scopus, PubMed, Google Scholar, were accessed with the key words, “burnout,” “doctors,” and “burnout syndrome.” Besides newspaper articles and other media reports were also reviewed.

What comprises burnout?

Burnout came to be recognized since the 70's as a combination of signs and symptoms occurring in people who did not have any previous psychological disorders.⁸ Burnout is precipitated when the ideals, capabilities and interests of the worker do not match the actual job requirements.⁹ The symptoms develop insidiously. Early stage is characterized by emotional exhaustion, disillusionment with the job, lack of adaptability and pessimistic attitude towards job, peers and patients.¹⁰ Later the triad of exhaustion, depersonalization and reduced perception of personal achievement which define burnout becomes evident.¹¹ Psychosomatic manifestations may be present. Psychological symptoms such as frustration, anger, panic, anhedonia, unprofessional behavior, failure to cope, hopelessness, lack of empathy, etc are common. In addition there may be physical symptoms such as fatigue, insomnia, tension headache, muscle tension, and gastrointestinal disorders. There is low self-esteem.

Strictly speaking, burnout is not a disease but rather a stable, chronic and insidious process that creeps in due to continued occupational stresses leading to emotional and physical exhaustion and low morale.

The International Classification of Diseases 10th Revision (ICD-10), classifies burnout under Z73, i.e. problems with life-management difficult excluding problem related to socioeconomic and psychological circumstances.

Diagnosis of Burnout

Maslach Burnout Inventory, a 22-item scale was earlier used to measure burnout.¹¹ Scoring was done on a 7 point Likert scale on various items to capture emotional exhaustion, depersonalization, and reduced perception of personal achievement. A cutoff value beyond a certain score indicated burnout. Limitation of this scale was that norms for various specialties and across cultures were not defined. This limited external validity and comparison of studies.

Because of this limitation a more recent scale, the Copenhagen Burnout Inventory (CBI), is being increasingly used in many countries.^{12, 13} This scale comprises three dimensions: personal burnout; work-related burnout; and client-related burnout. In validation studies all these dimensions have been shown to show good reliability and validity.¹² Besides, the three dimensions of the scale predicted fairly well sickness absenteeism, insomnia, excess use of painkillers, and intention to change jobs.

Reservations about burnout being a distinct disease category

Bianchi et al,¹⁴ have expressed reservations in classifying burnout as a distinct disease entity. They maintain that though there has been increasing concern about burnout in recent years it cannot be elevated to a separate diagnostic category. This is because the constructs defining burnout have weak foundations both from clinical and theoretical aspects. They state that burnout at its core is a form of depression. They conclude that future research should focus on environmental determinants of job stress leading to depression rather than encourage proliferation of ill defined and redundant diagnostic categories.

Burden of burnout

A precise estimate of burnout among doctors and allied professionals is lacking. This is due to controversies surrounding its distinct entity as well as lack of robust measurement scales as mentioned above. Nevertheless some crude estimates can sketch the burden of burnout among the medical profession.

A recent survey¹⁵ on burnout among medical practitioners in India over 9000 participants achieved very poor response rate. Only 482 responded. Results from this study on an unrepresentative sample indicate a high prevalence of burnout among Indian doctors; 45.02% scoring high on emotional exhaustion; 65.98% scoring high on depersonalization and 87.14% scoring low on personal accomplishment scale.¹⁵ A systematic review from China of 11 research papers with over 9000 participants revealed a very high prevalence ranging from 66.5% to 87.8%; risk factors being those who worked more than 40 hours per week; those in tertiary hospitals; younger in age; and those with negative individual perception towards work and life.¹⁶

Studies from developed countries when one expects better working conditions also indicate high burden of burnout. Shanafelt et al,¹⁷ reported lifetime risk of burnout among one third of doctors in the United States. The “natural history of burnout” commences from the medical student's undergraduate days. Prevalence ranging from 31% to 49.6% has been reported among medical students.¹⁸ During residency increasing trend has been noted. A burnout prevalence rate between 30% to 76% has been reported among medical residents from studies around the world.^{19, 20, 21, 22, 23, 24}

Determinants of burnout

In recent times, the job-demand-resources (JD-R) model is increasingly used to explain the determinants of burnout.^{25, 26} This explains well the burnout components such as emotional exhaustion, depersonalization and reduced achievement. JD-R model is derived from the fact that the two basic factors in any work environment are the demands of the job and the resources available for the task. The demands may be physical (such as long hours in the operation theatre), psychological (such as

caring for terminal ill patients and counseling their family members) and social (cutting down on quality time with family and friends). Resources available include the quality and adequacy of the work environment – physical, social, psychological and organizational.

However this model does not explain the psychological mechanisms of burnout. To overcome this, Fernet et al,²⁷ have attempted to present the multidimensional nature of burnout by incorporating the self-determination-theory (SDT) model^{28, 29} to the JD-R model.

Self determination theory (SDT) assumes that individuals value, autonomy,³⁰ competence,³¹ and connectedness³² in the workplace.

What can be the determinants or causes of burnout based on these explanatory models? When we consider the JD-R model we can easily appreciate the vulnerability to burnout which doctors in the country face.

The job of a doctor demands provision of high quality health and medical care to patients visiting the hospital. To achieve these demands, resources such as proper infrastructure (beds, water supply, electricity, etc), adequate staffing, and good availability of essential drugs are the resources required. The state of public hospitals in India is far from satisfactory. From the most peripheral health facility, i.e. the Primary Health Centre (PHC), to the tertiary care hospital both doctors and patients are usually unhappy due to deficient infrastructure; inadequate manpower; high patient load; poor quality of services; out of pocket expenditure.³³ Some of the PHCs even lack basic amenities such as water supply, and electricity undermining the morale and efficiency of doctors and other health workers. Because of poor infrastructure in the PHCs doctors working in them are vulnerable to burnout and prone to migrate to urban areas with their patients on their heels. This leads to overcrowding of public hospitals in urban areas.

In urban areas government hospitals due to patient overload are bursting at their seams.³³ This leads to mismatch between the demand and capability to deliver satisfactory medical care. Large number of patients precludes proper physician patient rapport which may lead to frictions, depersonalization and lack of job satisfaction. These can lead to burnout.

What about doctors in the private sector? The modest private practice of the family physician is increasingly being replaced by large super specialty corporate hospitals driven by advances in medical technology. These are the preferred choice of those who can afford and an increasing number of beneficiaries under medical insurance schemes. These high end private hospitals have been compared to shopping malls.³⁴ Prior to advent of market forces, medical care in the private sector

was provided by family physicians. This promoted doctor-patient relationship and “connectedness.” The physician managing his own practice enjoyed “autonomy.” Proper apprenticeship during internship and resident training without the pressure of coaching classes for competitive examinations laid the foundation for sound professional “competence.” So according to the self-determination-theory (SDT) model earlier generation of doctors enjoyed all the three factors, i.e. autonomy, connectedness and competence. Job satisfaction is a key factor in prevention of burnout.^{35, 36, 37} Medical career in such an environment was fulfilling and satisfying.

Not any longer. Smaller medical establishments run by doctors are being pushed to extinction with the rise of corporate multispecialty hospitals. Management controls how doctors work. Doctors are losing their “autonomy.” Super-specialists in corporate hospitals attend to one system or part depending on the specialty and not at the whole person. This “assembly line” process compromises the doctor-patient relationship and “connectedness.”

Earlier generation of doctors started picking up the art during internship by way of “learning by doing.” The present day intern is too busy cramming for entrance examinations for a postgraduate seat and attending coaching classes leaving little time and energy to pick up the art of medicine during this crucial phase. This poor foundation may affect the future “competence” of medical graduates particularly in the soft skills such as history taking and clinical examination.

Medical teachers face a double whammy. Both medicine and teaching are stressful occupations. A national study among Dutch medical teachers established emotional exhaustion and burnout as an occupation hazard.³⁸ Other studies have explored burnout among medical teachers in different academic disciplines.^{39, 40, 41} These studies suggest younger age, earlier stage of teaching career, and lesser academic achievement as risk factors for burnout.

Burnout among medical teachers has received little attention from Indian researchers. Indian medical education is under a “license permit” system with frequent inspections by regulatory agencies. This puts additional stress on medical teachers with the “Damocles’ sword” of “surprise inspections” hanging over them when all leave and movements are restricted.

Richard Smith the former editor of the British Medical Journal summed it up in an Editorial, “Why doctors are so unhappy”? Because they are “overworked and under-supported.”⁴²

Impact of burnout on efficiency and health

Burnout adversely affects performance due to emotional exhaustion, low mood and failure to concentrate.⁴³ Prolonged

stress can lead to poor physical and mental health. Burnout can also be associated with psychiatric morbidity.⁴⁴ Burnout leads to poor patient care and medical errors.^{45, 46}

Burnout can lead to psychosomatic problems such as insomnia, irritability, and problem with social relationships.^{15, 47} Doctors have higher rates of stress compared to other professionals.^{48, 49} Burnout has been attributed to increase the risk of cardiovascular disease.⁵⁰ It is also associated with high cholesterol, triglycerides, glucose and uric acid levels in the blood.¹⁵ Later changes of burnout may cause irreversible physiological changes.⁵¹ Victims of burnout may opt for early retirement.⁵² It also leads to frequent job changes.^{53, 54, 55} Burnout can lead to post traumatic stress disorder (PTSD), predispose to alcohol use and suicidal ideation.⁵⁶

Measures to cope with increasing burnout among doctors

As mentioned earlier, there is a crisis of leadership in the medical profession. This leads to lack of autonomy which is a risk factor for burnout. Besides leadership per se is protective against burnout.⁵⁷

Good leadership and management skills training during undergraduate and postgraduate training has been advocated.^{57, 58, 59} Training doctors to have better control over their work environment and organizational decision making is likely to improve their well being.⁶⁰

Another long term measure is enhancing psychological resilience.⁶¹ This is an emerging multidimensional theory of the human capability to cope with, overcome and become stronger in the face of adversity.⁶²⁻⁷¹ Focus should be on the strength of individuals rather than vulnerabilities.⁶¹ This will empower the doctors and other health professionals towards adaptation in difficult work situations. The concept of resilience has been adapted from situations of survivors of war, trauma, and military operations.⁶¹ Present day doctors do work in warlike conditions!!

Resilience is culture specific.^{72, 73} Studies are indicated to explore the impact of culture on stress and coping mechanisms.

General measures such as exercise and physical fitness may improve resilience.^{74, 75} They also have neuro-protective effects.⁷⁶

Stress reduction programs can help reduce the effects of burnout.⁷⁷ Stress management can involve relaxation techniques to cognitive behavior therapy. Evidence shows that health professionals who resort to such interventions show cope better with burnout.⁷⁸

At individual level, purpose and meaning in life are protective to burnout. Health professionals with these qualities along with a positive outlook and a good work-life balance are less prone to burnout.⁴⁶

Measures by employers can also reduce burnout. If the well being of health professionals are given priority there is less incidence of burnout.^{79, 80} Recent research suggest that interventions at the individual level yield short term benefits, up to six months, while those at the organizational level have longer benefit, more than a year.⁸⁰

However, managing of chronic burnout is not easy as this may lead to irreversible physiological changes.⁵¹ Cochrane reviews on burnout mention that effects of various stress management interventions is modest to equivocal.⁸¹

CONCLUSION

Burnout among doctors is a serious problem with adverse consequences both at the individual and medical community levels. There are many unresolved issues in burnout research, such as lack of consensus whether burnout is a disease, the exact prevalence due to different criteria of burnout by different researchers, and the interventions which work. To compound the problem burnout has a social and cultural context. The issues in the west many not be similar in Asian countries, which are undergoing rapid social changes which may be contributing to increase in burnout among professionals.

Interdisciplinary research is called for to capture the various facets of burnout and reach consensus on its nature, and find effective interventions which are culture specific.

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