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REVIEW ARTICLE

BURNOUT SYNDROME AMONG HEALTH CARE PROFESSIONALS: IMPLICATIONS FOR HEALTH CARE PROFESSIONALS AND PATIENTS' SAFETY

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ABSTRACT

Health care delivery systems are desperately in need of quality improvement and cost efficiency despite increasing rates of chronic diseases, co – morbidities, overwhelming workload etc. globally.
To navigate through these challenges, the health care professionals' daily activities are critical to improved quality of healthcare delivery. Regrettably, failure of the Health Insurance Schemes to meet its laudable objectives and poor funding of private and public health facilities have put enormous pressure on the health care professionals (HCPs); the result of which is burnout among the HCPs.
The HCPs are severally faced with the challenge of empathising with patients who are unable to bear the cost of healthcare. Often, they pay the patient's healthcare bill from their pocket to provide emotional and physical care coupled with unconducive work environment and inadequate reward system. Furthermore, the HCPs are left with little or no input into the processes and systems in their work environment leading ultimately to poor health delivery and compromised patient safety.
This article's aim is to examine burnout amongst HCPs and its implication for them and their patients. The HCP as a patient in need of health care, relationship between burnout and patient safety, risk factors, diagnosis and management approaches to burnout will be explored.
The management approaches that will prevent or ameliorate burnout lies on employers and employees of health care delivery services, health care and allied institutions, health care policy makers and health system managers with health care quality improvement as the driving force.
Finally, it must be noted that burnout syndrome is prevalent across all health care professionals and health care settings and have been shown to impair health care providers' capacity to ensure safe practices and detect emerging patient safety threats.

INTRODUCTION

The physical, emotional, and psychosocial well – being of the health care provider and how this translates to the safety or otherwise of the patient is an unending debate that have peaked in most countries, whose government cares about the well-being of their citizens. The concept of burnout is not new to the health care professionals.[1,2] However, one cannot but note the tremendous pressure that health care business places on the health care professionals.

These pressures come from various expectations of the health care seekers placed on the health care professionals (HCPs). These pressures include challenges of clinical work, limited time resource, Professional scheduling off the control of the HCPs, other competing demands for one's time and attention and the inconsistent roles and relationship with leadership and administration in the health care industry.[2]

In developed world the rapid change in health care system is driven by efforts geared towards the delivery of better health care, improved health, and lowered health care costs while at the same time providing health care for a population that is aging.[3] Other rapid change drivers include new payment and health care delivery approaches, electronic health records, patient entries and the need for openly reported quality metrics.[3] All of these add to the pressures already enumerated and have changed the landscape of the health care industry.[2,3] The health care providers (HCPs) navigate through rapid changes carefully to ensure health care improvement which is dependent on their daily health care delivery activities.[2,3] The resultant effect of these changes and pressures is the phrase “Burnout Syndrome” (BOS) whose rate has increased in a dramatic proportion. The manifestations BOS include high degree of emotional exhaustion and depersonalization (the person becomes cynical) with a low sense of personal accomplishment from job he/she had hitherto enjoyed doing.[2,3]

Recognition of BOS by HCPs has increased of recent. For instance, the Agency for Health Care Research and Quality in a US study, show-cased an occurrence among HCPs as follows: 10 – 70% nurses, 30 – 50% physicians. The pharmacists and other health care providers are not left out and prevalence depends on their practice environment.[2] The community pharmacists who experience less career fulfilment have increased BOS, when

compared with pharmacists in other work spaces.[2-5]

In a 2016 survey, comprising of 3, 085 pharmacists working in various practice setting revealed that though 72.5% of them expressed job satisfaction, 63.4% manifested increased features of burnout over the previous year - a pointer to the prevalence of burnout among these categories of HCPs.[5]

Though the HCPs appear ignorant of the danger posed by BOS to their patient care capacity, BOS have not only affected the safety of the patient but also the healthcare provider's safety.[5-9]

Studies have shown that poor work conditions lead to poor HCPs wellbeing and ultimately to burnout syndrome from modest to high level burnout. When the HCP is burnt out, the patients experience poorer safety with medical errors on the increase.[1,5] Medical residents are also affected by burnout and their level of burnout correlated well with increased medical errors as 64% of the residents who experienced burnout symptoms also admitted committing medical error as opposed to 22% who did not experience any burnout features.[10-12]

Globally it has been acknowledged that BOS affects HCPs across board in studies in Europe, US, Asia and Africa inclusive and reports has it that even medical students are also vulnerable to burnout.[8-13]

DEFINING BURNOUT

Burnout resulting from one's occupation stems from unresolved, long – standing work stress described first in 1974 by Freudenberger.[5,14] He also defined professional burnout in the context of physical and behavioural indicators as follows: Manifestations of "increasing anger, frustration, suspicion and paranoia regarding colleagues' influences on one's own personal career ambitions, excessive rigidity and inflexibility in practice, and the appearance of characteristics of one who suffers from depression".[5,14] Freudenberger noted that the dedicated and committed professionals are usually the ones involved with burnout and that burnout was not an acute disorder but the zenith of the effects of professional responsibilities and work setting.

Three dimensions of burnout described are Emotional exhaustion, Depersonalization with cynicism and Decreased sense of personal accomplishment.[5,14,15]

The occurrence of these three dimensions above are continuous; starting with feeling of emotional strain and physical depletion attributable to the individual's work. She/he is indifferent and uninterested in his/her job and manifest unwillingness to resolve challenges arising from their everyday work life. As emotional exhaustion gets worse, depersonalization with cynicism set in; the person begins to manifest negative attitude towards her/his work and workplace; detached from her/his work. Several health-care providers have reported hearing phrases such as "The cardiac arrest's family is in the waiting room" When feelings and thoughts are unreal or outside of oneself, it precludes HCPs from caring about the outcome of the patients in question. Thus, leading to worsening of professional satisfaction.

Reduced personal accomplishment which speaks to the third component, is all about feeling incompetent and having reduced work output despite palpable accomplishment. In this case HCPs feel that whatever they have done was not adequate. At this time, they begin to loathe the work they had hitherto enjoyed doing and would not appreciate the effects their attitude is having on their patients.[14,15] This scenario emphasizes the need for the operators of health industry to invest more into staff well – being of those they hire, train and epitomise.

Other definitions of burnout include the following:

1. The process that one goes through leading to physical, emotional, and mental exhaustion resulting from prolonged experience of situations that demands one's emotional exertion.
2. The catalogue of disarticulation between what a person is and what the person must do charactericed by loss of standards, essence, self-esteem, resolve and eroded human soul.
3. According to Meriam Wester's collegiate dictionary burnout is defined as physical and emotional exhaustion resulting from prolonged stress or frustration.

BURNOUT IN HEALTH-CARE

The American Medical Association and the RAND Corporation whose resolve was to improve decision and policy direction in health, surveyed 6 states in the US looking for factors that influenced "Physicians professional satisfaction" and how this relates to physician's professional performance.[5,16] The study showed that quality of health care and electronic health records (EHR) use were the main issues linked to burnout. Professional satisfaction among physicians was also connected to perception of high-quality health care delivery;[5,16] while impediments to providing high quality health care such as insufficient institutional leadership backing and obstacles to paying fee for services were linked to

professional dissatisfaction. The role of EHR in burnout noted above was found to be a potentially double-edged sword; in order words it can lead to physician professional satisfaction and perception of high-quality health care delivery when it applies to interfaces that promotes health information sharing while on the other hand was found to contribute to physician professional frustration in several ways.[14-16] The applicability of EHR, time limitations, impact of ICT on the HCP – client interaction, effect on profession fulfillment, and deterioration in value of clinical documentation in the EHR were all quoted as factors that lead to dissatisfaction and eventual burnout.[14-16] Other factor that influence physician satisfaction include variations in health care delivery system, extent of professional autonomy and practice control; institutional leadership and support; fairness and respect; quality and content of work; support from allied HCPs; remuneration issues; professional liabilities and healthcare regulatory issue; all leading to reduced quality of healthcare, professional satisfaction and eventually burnout.[14-16]

MENTAL HEALTH ISSUES RELATED TO BURNOUT

Some mental health entities have something in common with burnout. Burnout shares some features with depression. While some features overlap, some others do not present the same way.[5,17] Weight loss, suicidal ideation and retention of individual life enjoyment capability are rare among those experiencing burnout.[5,18] while depression affects every aspect of one's life; burnout affects only the work aspect of an individual's life.

Despite above findings a metanalysis on the relationship between depression and burnout observed no strong association between the two and thus concluded that it was only a mental conception.[5,19] Most current studies that evaluated the dissimilarity between depression and burnout were not clear on any difference existing between the two; thus, creating room for further studies that will draw a line between the two entities or confirm that it is just a continuum from one entity to the other.[5,19]

In Australia, a cross sectional survey on burnout among physicians, showed that people who manifested burnout were more likely to experience major depression while those physicians who manifested depression first were more likely to experience burnout; suggesting that burnout might just be a prelude to major depression and that depression can also lead to burnout.[5,17] It became clear that researchers investigating persons with burnout should use depression inventory tools and the multidimensional burnout inventories. This will help to assess for the possible coexistence of the two conditions or otherwise in those being assessed. There are also suggestions that if burnout is equated with depression, will lead to higher acceptance of treatment modalities; since the diagnostic criteria for burnout has been described as weak and variable depending on the evaluator, definition and the assessment tools used.[16-20] The universal application these findings face obvious debate on reliability and validity. Every health care professional involved with training and teaching of future health care providers needs to know that the upcoming generation of professionals may be more vulnerable than present or past generations, when exposed to stressful situations and criticism.[21-24]

Stigmatization of HCPs in need of psychiatric treatment amongst HCPs remains a challenge to the medical profession.[25] The fear of the aftermath of medical professionals not being able to provide adequate care for their clients, may be an erroneous perception that can linger in the HCPs mind and ultimately lead to burnout and these concerns need be addressed. Addressing the HCPs mental health need will not only improve the medical professional's well-being but will also create room for persons suffering from associated psychiatric conditions to continue to deliver quality healthcare to their clients, while still being fulfilled in their professional job.[25,26]

FACTORS RESPONSIBLE FOR BURNOUT AND IMPACT ON THE HEALTH WORK FORCE

The prevalence of burnout among health care providers have reached a dangerous level; requiring an urgent attention when one considers the causative factors.[26-28] If the health care professional cannot provide care for a condition that affects him/her – the medical professional; how can he/she address same condition effectively when he cannot recognize that he has similar situation that requires another HCP address.

Causes of burnout include stressful work environment, HCPs' to cater for her/himself, limited resources and unfriendly workplace scheduling.[14-20]

Burnout among HCPs lead to negative consequences for everyone in the healthcare industry.[15-21] While the HCPs are overwhelmed and exhausted, the patients are dissatisfied; question the quality of health care delivered to them. The medical errors that occur eventually lead to increasing distrust from the patient leading to strained HCP's – patient interaction and ultimately the patient searches for another HCP.[16-22]

WORK RELATED CAUSES OF BURNOUT

Several studies including meta-analysis have shown that work associated Stress is the leading cause of burnout and job dissatisfaction among HCPs.[3] Mental stress in the HCP was related to the work environment.[3,4,12] A lifesaving surgeon faces immense burden of achieving good surgical results that improve quality of life particularly in the critically ill clients. This situation cuts across all HCPs who must deal with large patient load and often complex health conditions and treatment plans.[3,4,12] Health care seekers expectations on the HCPs also leads to work-related burnout.[26-28] Health care seekers expect HCPs to perform their duties excellently, thus providing the patients with excellent quality of healthcare. These expectations inturn lead to complex and difficult work scheduling with resultant imbalance between work and home life of the HCP while administrative environmental factors like organizational principles; absence of physician – nurse collaboration, loss of opportunities for career advancement, social support and worsening autonomy and meaning of being at work all contribute to burnout among the HCPs.[3,4,12,29-35] On the other hand studies have shown that favourable leadership behaviours encouraging staff input, mentoring programmes recorded lower rates of burnout and increased rate of job satisfaction amongst HCPs.[29-35] Allowing HCPs to have control over their workplace issues also resulted in lower incidences of work-related stress cases and increased career satisfaction.[30-37]

Other predictors of burnout in HCPs include fruitless care, insufficient consent and false hope.[32-41]

PSYCHOSOCIAL CUASES OF BURNOUT

One's world perception, personality traits and lifestyle have been shown contribute to burnout.[42-46] Downtime usage, the pressure one brings on her/himself and self-perception in the world all play important roles in the occurrence of burnout. The psychosocial causes of burnout can therefore be classified primarily into personality traits and lifestyle causes.[42-44]

Pessimism and perfectionism in oneself and the world, the need to exercise control and reluctance to delegate duty and high attainment type A temperament have all been related to causation of burnout globally.[42-46]

The lifestyle factors include much work without time for relaxation and social events, lack of supportive relationships, taking up too many responsibilities beyond one's capability without help from other colleagues and not getting enough sleep.[42-46]

EVALUATING THE RISK AND MAGNITUDE OF BURNOUT

1. Although burnout is globally acknowledged to be prevalent and increasing in magnitude, there is no consensus on modalities for interpretation and measurement of burnout syndrome.[40-46] Burnout syndrome prevalence varies from 5.0% to 55.3% and above in some regions. The severity is measured using the Maslach Burnout Inventory (MBI). The MBI which is the gold standard for evaluating burnout in research was developed in the 1980s.[15] The tool is a self-administered 22 items questionnaire that includes human services survey sub-divided into the 3 dimensions of BOS already alluded to above and takes about 15 minutes to complete. The validated tool incorporates accounts, about the individual's personal emotional state or attitudes towards one's job; for example, “I feel burned out from my work”. Respondents are required to indicate the frequency of experiencing these feelings on a 7-point measure with 0 indicating never and 6 indicating everyday experience.[15,26] Maslach and co, in showcasing the assessment of risk factors for the development of burnout stated that burnout can be divided into seven categories as documented in the following publications – MBI manual, Early predictors of job burnout and engagement and also by the work by Morris NP.[15,26,27] The first category which is workload shows that workload leads to reduced salvage time from demanding conditions which in turn leads to increased rates of emotional exhaustion and eventually to burnout.[28]

The MBI tool shows that emotional exhaustion dimension is subdivided into 9 items with a total score range of zero to 54.[15,26] Several studies in the US, have assessed workload as a risk factor amongst practicing community pharmacists and found an association between increasing workload and increased rates of burnout and it was noted that the situation was similar in other countries healthcare systems.[29-32] Besides documentations on the evaluation and severity of burnout, the risk factors associated with Burnout and Strategies for alleviating Burnout risk have been well documented.[26,27] The table below shows the risk factors for burnout and the strategies that will mitigate against the risk factors.[26,27]

Table showing the Risk Factors Associated with Burnout and Strategies for Alleviating Burnout Risk.

Risk factors	Examples	Strategy or Strategies for Alleviating Risk
Workload	Job demands exceeding human limits; acute fatigue from a demanding work event (e.g., meeting a deadline, dealing with a crisis); limited time to rest, rec over, and restore	Permitting time at the workplace to recover from a stressful event
Control	Role conflict, absence of direction in the workplace	Clearly defined roles and expectations from organizational leadership
Reward	Inadequate financial, institutional, or social reward in the workplace; lack of recognition from stakeholders (patients, managers, colleagues)	Identify suitable rewards to recognize achievements, provide opportunities to teach or mentor trainees
Community	Inadequate opportunity for quality social interaction at work; inadequate development in areas related to conflict resolution, provision of mutual support, professional closeness, or team building	Promote participation in professional organizations
Fairness	Perception of equity from an organization, organization leadership, or supervisor	Transparency in decision-making
Values	Organizational values are incongruous with an individual's personal values or beliefs; employees need to choose between work they want to do a nd work they must do	Align personal expectations with organizational goals
Work – individual's inappropriateness	Personality does not fit or is misaligned with job expectations and coping abilities	Evaluate and align job responsibilities with personal and professional expectations

The perception that the health care professional's supervisor was fair and equitable makes the development of burnout symptoms unlikely, thus confirming that job place evenhandedness and fair-mindedness influences effort – payment

MAGNITUDE OF BURNOUT

Several studies in US have shown that greater than 50% of US physicians has burnout experience while those working in the specialty's front lines of care such as family medicine, emergency medicine, general internal medicine, neurology etc. had the highest risk of burnout.[3,15] Burnout was also found to be two times more prevalent among the physicians than in the other US workforce. Similar studies among other HCPs - nurses' pharmacists etc. showed similar trend of burnout and that prevalence was on the increase.[3,12,15]

The global prevalence of burnout syndrome is between 50% and 70% or greater among HCPs.[47,48] In Nigeria however, there are few studies carried out, among HCPs in all the six geographical regions of Northwest, Northeast, Northcentral, Southeast, Southwest and South-south respective.

BURNOUT AND PATIENT SAFETY

Patient safety according to WHO can be defined as the prevention of medical errors and adverse effects to patients in relation to health care.[33] Definition by the US National Health Services (NHS) states that it is the avoidance of unintended or unexpected harm to people in the process of providing health care for them.[34] Patient safety have gained attention globally and credit must historically be given to other industries, especially the aviation industry (where best practices like communication and process evaluation where strictly adhered to) from where patient safety was borrowed into the health care delivery system.[2]

As in every other condition bordering on quality of health care, factors contributing to burnout and BOS effect on HCPs and patient safety should appreciated prior to consideration for BOS mitigating strategies.[5,35]

The MBI measuring tool though considered a weak one, is critical to establishing association between burnout and patient safety. In a multicenter study in Swiss-land, the relationship between burnout and patient safety was established.[2] The study conducted in 54 intensive care units and published in 2014; showed that clinician safety perspectives related to standardized mortality ratios.[2] Deductions from the above study made Investigators to propose that the connection between burnout and patient safety was driven by lack of incentives, vigor and impaired

intellectual function in the HCPs. For example, the study revealed that emotional exhaustion in the clinicians led to reduced performance since the clinician will prioritize on the most pressing and important task. Impaired intellectual functioning in the presence of burnout also led to reduced attention to details, cognitive function vigilance and ultimately to increased medical errors with clinicians being apathetic to the patients.

All the foregoing leaves us with a HCP whose professionalism continues to dwindle for as long as he/she suffers from the syndrome called burnout. This fact was well elucidated by Christopher Cheney in his paper on Physician Burnout Impacts Safety, Professionalism and Patient Satisfaction where he referenced a meta-analysis of 47 studies involving 42,000 physicians.[38] This meta-analysis revealed that all the three dimensions BOS – emotional exhaustion, depersonalisation and reduced personal accomplishment were linked to patient safety.[2,38] They found out in the study that physician burnout doubled the odds of involvement in patient safety, odds of low professionalism and odds of low patient satisfaction.[38] The highest tendency for unprofessionalism was associated with depersonalisation in the study while un-professionalism was higher among residents and physicians in their early career period when compared to their middle and late career collegues.[38]

The above findings have implications for health care expenditure and quality of clinical care service delivery, since earlier studies have shown that adverse events' cost implication is in billions of dollars per annum. It therefore means that physician burnout is highly prohibitive in monetary terms and seriously undermines society's need for safe and quality health care. Thus, if physician burnout is addressed, then improvement in patient safety quality health care and economic monetary savings will be assured.

Going forward the following steps should be taken to address physician burnout: Organizations providing health care should score physician depersonalization with other quality measures to drive health care interventions for quality improvement and patient safety, Patient safety and quality of care reporting should be standardized across all health care facilities to ease understanding of physician burnout and its' relationship with patient safety and finally; Physicians in their early careers should be supported in ways that will lead to prevention of burnout especially during their residency training. These three strategies have been shown to be the most efficient strategies for building health institutional immunity against workforce shortages and poor patient safety outcome.

John Palmer in his paper on Physician Burnout, where he quoted above meta-analysis, noted that the highest rates of physician burnout occurred amongst critical care physicians (48%), neurologists, and family physicians (47%) as well females being more prone to burnout than males (48% of women versus 38% of men).[39]

He therefore summarised in his paper, that for Physician burnout to be addressed the following steps should be taken: 1. The physicians should be listened to, thus helping them to talk about their feelings since their highest complaints was that no one was listening to them. 2. The physicians need to be put in charge of the stressful situations around them to help them be part of the solution, to the challenging situations around them in terms of decision making. 3. Exercise and good nutrition should be promoted and enhanced in the workplace. This will reduce the tendency for workers to feed their emotions when stressed up by work as exercise and good nutritious meals times are in groups. 4. End bad ergonomics by reducing monotonous repetitive processes by adopting the "20-20-20 rule," in which the worker for every 20 minutes at a computer screen, looks up for 20 seconds at something 20 feet away to give the eyes a chance to refocus and relax and 5. Giving the worker personal help when he/she has financial problems, sorting out family challenges and childcare challenges by either introducing childcare services in the facility, inviting financial expert for a chart with the staff or a lunch out with staff etc.

RECOGNITION AND TREATMENT OF BURNOUT SYNROME

From all the studies reviewed it's obvious that BOS leads to increased medical errors, reduced patient safety, reduced quality of healthcare, reduced healthcare service patronage and increased severe adverse events.[38,42-46]

The need to categorise BOS as a disorder needing care and treatment is obvious. This will lead to improvement in patient safety and health care outcomes, improved health care staff retention, improved quality of life and job satisfaction. Also, the health care provider – patient relationship and non – work-related activities and interests are all improved upon leading to improved quality of life. Several studies including population studies of more than 3, 000 subjects have shown that 40 percent or more of HCPs reported at least one symptom of

burnout,[29-39] making it imperative that BOS among HCPs be addressed. Other findings from the studies showed that burnout was more among the physician who rated their leadership less than satisfactory, thus emphasizing the need for organizational leadership to cater for the well-being of their physicians/staff.[30-39]

Other ways physician burnout can be addressed include adopting workflow and communication strategies that have led to increased job satisfaction rates with reduced incidence of burnout.[35-39]

The triple aim of improving the patient wellbeing in care, improving the health of the population being served and reducing per capital costs of health care was adopted in the above studies. Suggestion has been made that the physician wellbeing be added to the triple aim to make it quadruple aim idea and that this fourth aim was foundational to achieving the other three.[35-39]

Little or no research work has been carried out on the impact of executive coaching in addressing burnout and hence was not advocated in all the studies reviewed.[35-39]

WHO PRONOUNCEMENT ON BURNOUT

In the last week of the month of May; 2019 WHO officially recognized workplace burnout as an entity in its ICD – 11 (International Classification of diseases, 11th edition).[39-40] Although WHO in her statement did not classify burnout as a medical condition, she however regarded it as a syndrome resulting from chronic workplace stress that was not properly managed. Furthermore, the ICD – 11 stated that burnout is characterised by three conditions/three dimensions: 1. Energy diminution or exhaustion feeling, 2. Increased mental distance from one's work or pessimism and 3. Reduced professional effectiveness.[40]

CONCLUSION

This paper concludes that burnout has been widely studied globally especially in US, UK, and Europe, except in Nigeria where there is paucity of data on burnout. The various studies reviewed shows that burnout has serious implications for the patient's and HCPs' safety and is prohibitive in terms of financial loss. The implications include deterioration in patient safety, high workload, long hours of work and problems with interpersonal relationship for the healthcare professional. Prompt recognition, management of burnout and education on burnout are critical strategies that can reverse the effects of burnout and the WHO recognition of BOS as a disease entity that needs treatment is a boost towards development of prevention and promotion measures that will enhance quality of health care delivery and improvement in patient safety.

RECOMMENDATIONS

1. Since burnout out has been linked with perception of unsafe health care environment; promoting preventive reporting behavior is critical to addressing safety concerns within the health care environment.
2. With the WHO pronouncement on Burnout as a disease entity, WHO and member countries need to key in by coming up with global and National guidelines/policies for the recognition, diagnosis, treatment, and prevention of burnout syndrome for implementation.
3. Education and training materials need to be developed on burnout syndrome to enable health care professionals acquaint themselves with diagnosis and treatment modalities of burnout syndrome.
4. Burnout syndrome courses should be included in the training curriculum on Psychosocial medicine in both undergraduate and postgraduate medical training programs.
5. Further studies are needed on burnout syndrome particularly in Nigeria where there is paucity of data on burnout syndrome.
6. Globally further studies are needed on prospective studies to enable determination of causality, to clearly define healthcare staff wellbeing, determine the role of executive coaching in addressing burnout and to determine the safety and effectiveness of various treatment and prevention modalities already being used for the management of burnout syndrome.

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