Original Article

Burnout Syndrome among Doctors of a Tertiary Care Hospital in Southern Kerala

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Abstract

Background: Burnout in health care professionals has gathered significant attention due to its impact on quality of care and medical personnel. As a result of the intense emotional demands of the work environment, clinicians are particularly susceptible to develop burnout above and beyond usual workplace stress. In order to cultivate occupational intervention programs there is a need to estimate the prevalence of burnout among physicians.

Methods: From a total of 108 participants, data was collected using a questionnaire primarily consisting of "personal burnout" domain of the Maslach Burnout Inventory, which is a validated instrument to assess the burnout using three dimensions which includes emotional exhaustion, depersonalization and low personal accomplishment. In addition to summary statistics, analysis was done to find out the factors significantly affecting burnout.

Result and conclusion: The findings of this study indicate that the burnout syndrome is present among doctors across all specialty categories. 3.7% showed high emotional exhaustion, 13.9 showed high depersonalization and 12% showed low personal accomplishment. Age, gender, working hours, years of experience were the some of the factors significantly affecting burnout. Burnout exists among healthcare professionals and measures should be taken to identify causes and take remedial actions.

Keywords: Burnout, Healthcare Professionals, Kerala, Maslach Burnout Inventory.

Introduction

The medical profession has witnessed many changes due to the advancements in technology and improved hospital settings over the past few years which in turn have resulted in rising demands on the quality of patient care. According to International Classification of Diseases-11th revision "Burn-out is a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions: feelings of energy depletion; feelings of negativism

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or cynicism related to one's job; and reduced professional efficacy[1]. To provide the best possible service and also for a better working environment every institution has their own methods[2]. However, burnout still affects a large number of health professionals.[3]. Physician burnout is a condition that is not well understood and discussed [4]. There is no doubt that physician burnout, if left undressed, can lead to severe personal and professional consequences [5]. Among the healthcare workers during the COVID-19 pandemic, burnout is significantly more common, especially among doctors and support personnel[6]. Burnout is concerning for healthcare workers because caregivers who are experiencing burnout may be more dangerous for their patients' health than patients themselves[7]. Among resident physicians in training , burnout is prevalent and potentially avoidable[8]. Working in emotionally taxing circumstances makes the residency program stressful[9]. The findings that medical students' mental health profiles at matriculation are comparable to or even better than those of age-matched college graduates pursuing other careers, and that once they enter medical school, their mental health deteriorates to a worse degree than that of the age-matched college graduates, point to the curriculum and learning environment as the primary causes of burnout [10,11]. Because the causes differ between nations and even within a single country, every institution should carry out a separate investigation to determine the causes of burnout and implement preventative measures[2].

Studies to assess the prevalence of burnout among Indian health professionals are less. Indian health professionals vary from western professionals in terms of available facilities, infrastructure, patient load, working hours, emotional toil and working environment. In spite of these challenges there have been tremendous changes in the health sector of Kerala such as low infant mortality, increased life expectancy etc. To sustain the gains that are achieved and also for the further improvement it is very important to understand and take remedial measures for the burnout syndrome among doctors since they are the backbones of the healthcare system of a country. We wanted to assess the prevalence of burnout and its correlates among Indian health professionals in a tertiary medical college in Kerala, so that we can introduce strategies even from medical education period to reduce the burnout among health professionals and its consequences.

Materials and Methods

A cross sectional study was done among the doctors of clinical department of a medical college in Kerala. 108 doctors of the clinical departments were included. Those who were not available even after 2 consecutive visits and those who did not return the form were excluded. Data was collected through a semi structured Questionnaire. An appropriate rapport was established before administering the questionnaire. Proper instructions were given about the questions and informed consent was taken. Sociodemographic variables comprising of gender, marital status, type of family, educational status, designation was assessed. Burnout was measured by using the Maslach Burnout Inventory (MBI), which was first described by Maslach et al. (1996). The Maslach burnout model has three dimensions: emotional exhaustion, depersonalization and reduced personal accomplishment[12]. A key aspect of burnout syndrome is increased feelings of emotional exhaustion; as emotional resources are depleted; workers feel they are no longer able to give of themselves at a psychological level. Another aspect is the depersonalization (i.e., negative cynical attitudes and feelings about one's clients). A third aspect of burnout syndrome reduced personal accomplishment refers to the tendency to evaluate oneself negatively, particularly with regard to one's work with clients . MBI scale includes 22 seven-point questions on frequency of symptoms ranging from "0 = never" to "6 = every day". Among the 22 questions nine were for emotional exhaustion, five for depersonalization, and eight for personal accomplishment. All data collected were entered into Microsoft Excel and analysed using Statistical Package for Social Sciences (SPSS)v 27. Mann Whitney U test and Spearman correlation test was used to find out the association between various factors and burnout. Informed consent was taken from the study participants and confidentiality of personal information was maintained throughout the study. Approval from Institutional ethical committee was obtained before the start of the study.

Results and Discussion

The mean age of the study participants was 39.35(11.7) years.

Table 1. showing frequency and percentage of different sociodemographic variables.

Serial number	Variables		Number	Percentage
1	Gender	Male	60	53.7
		Female	48	46.3
2	Marital status	Married	9	8.3
		Unmarried	99	91.7
3	Type of family	Nuclear	16	15
		Joint	23	85

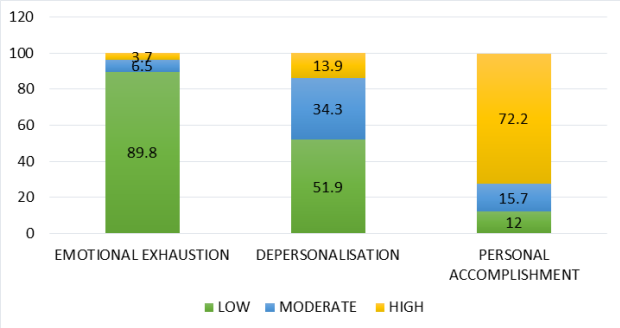

Figure 1: Distribution of burnout based on its domains.

Out of the total 108 participants 3.7%, 13.9%, 12% reported high scores of emotional exhaustion, depersonalisation and low personal accomplishment respectively. This was in contrast with a similar study conducted among 100 residents in South India where15% respondents reported burnout in dimension of emotional exhaustion, 44% in the dimension of depersonalisation and 50% in the dimension of reduced personal accomplishment[9]. The Burnout in our study was very low compared to studies from Germany, Nigeria, Turkey and other Western countries with the level of emotional exhaustion (37.4%), high level of depersonalization (45.6%) and low perception of personal accomplishment (50.3%). This may be because most doctors in Kerala in Tertiary care setting do not have to deal with mundane issues like paperwork, insurance companies and regulatory bodies compared to other countries[13,14].

Table 2. showing factors significantly associated with burnout syndrome.

Factors	Category	Mean score	*p value
Gender	Male	7.9	0.01
	Female	5.8	(depersonalization)
Marital status	Married	8	0.011
	Unmarried	14	(emotional exhaustion)
Type of family	Nuclear	41.2	0.006
	Joint	34.4	(personal accomplishment)
Alcoholism	Yes	8.9	0.023
	No	6.5	(depersonalization)
Skip meals	Yes	10.5	0.001
	No	6	(emotional exhaustion)
Skip meals	Yes	8.53	0.001
	No	5.04	(depersonalization)
Thought of leaving profession	Yes	12.6	0.001
	No	5.8	(emotional exhaustion)

Continue.....

Thought of leaving profession	Yes	9.9	0.001 (depersonalization)
	No	5.02	
Speciality	Surgical	7.29	0.03 (emotional exhaustion)
	Medical	10.14	
Speciality	Clinical	9.26	0.002 (emotional exhaustion)
	Paraclinical	4.13	
Speciality	Clinical	7.4	0.019 (emotional exhaustion)
	Paraclinical	4.2	

*(for the particular domain of burn out according to Maslach Burnout Inventory.)

Supporting our study another study from Maharashtra showed that males experienced more burnout than females[15]. It correlates significantly that depersonalisation burnout (p=0.01) seen more in males (mean score 7.9) when compared to females (mean score 5.8). We concur with the discussion of Maslach and Jackson (1985), who suggest that significantly lower levels of depersonalization among female respondents may be a product of traditional gender-role socialization [16]. It is widely accepted that girls and boys are taught to relate with others differently. Boys are encouraged to be autonomous and emotionally disconnected, girls are encouraged to be dependent and emotionally connected (Gilligan, 1982; Walters, Carter, Papp, & Silverstein, 1988). More specifically in terms of professional therapeutic practice, if women are traditionally encouraged to be more empathic and sensitive to others, whereas men are traditionally encouraged to be less emotional and more independent, male therapists may be more prone to deal with people in depersonalized ways (Maslach & Jackson, 1985). Although this rationale would also suggest that women may be more at risk for emotional exhaustion and involvement, this study did not reveal significant differences in this dimension.

A similar study conducted in a tertiary medical centre in Kerala also showed difference in prevalence of burnout across various specialties which could be because of the varied emotional and type of work demands of different specialties[17]. Medical residents have more interaction with patients that might be the cause for higher patient-related burnout when compared with surgical residents. In that study personal burnout was higher for surgical residents which did not yield significance in our study. A study on doctors working in the specialties of surgery and gynaecology in Germany was also able to find high personal burnout (48.7%).[18]

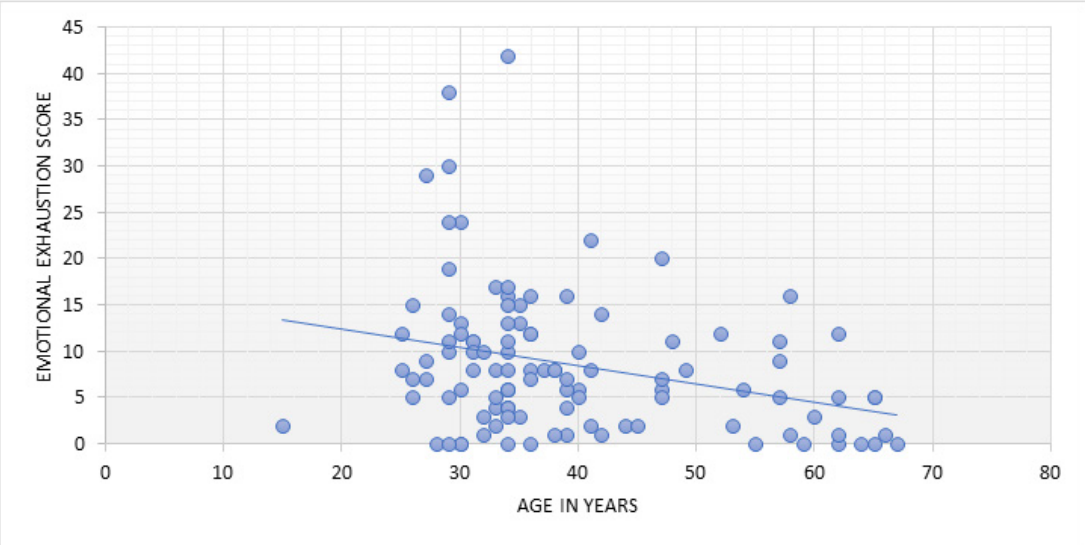

Figure 2 : Correlation of age with emotional exhaustion

This chart (Figure 2) shows as age increase burn out decreases. With Spearman correlation significance was obtained with all three domains i.e Emotional exhaustion (p value = 0.002), depersonalisation (p value= 0.036), low personal accomplishment (p value = 0.002).

In all studies doctors of younger age group and with low experience in practice experiencing more burnout than Doctors who are more experienced and aged.

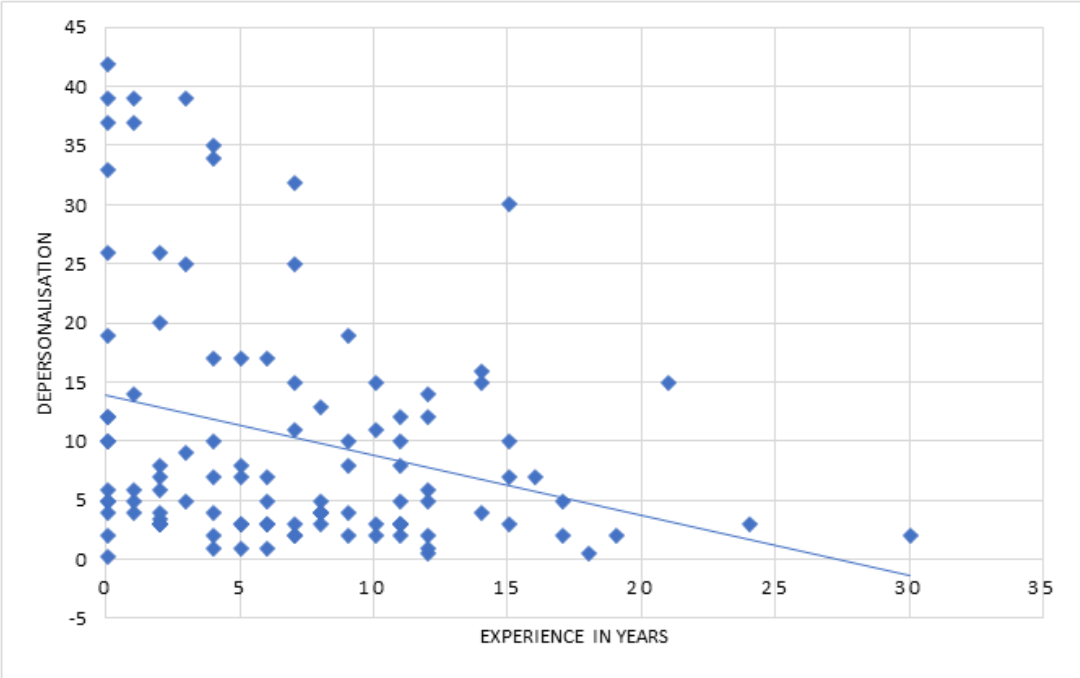

Figure 3: Correlation of Experience in years with Depersonalisation burnout

The chart (Figure 3) shows as work experience increases burnout decreases. The chart (Figure 3) shows as experience increases burnout decreases. With Spearman correlation we got significance in all three domains i.e., Emotional exhaustion (p value= 0.005), depersonalisation (p value= 0.001), low personal accomplishment (p value = 0.016).

Similar to a study published in Ethiopian journal , in terms of experience and age, our findings indicate that as clinicians get older, levels of depersonalization and emotional exhaustion go down[19]. In agreement with previous studies (Cicone, 2003; Lippert, 2000; Vredenburgh et al., 1999) it may be stated that with life experience comes an emotional maturity that serves as a buffer against symptoms of burnout as therapists age. These therapists may have developed long-standing, reliable personal and professional support systems and coping strategies over time. Also, with age, a sense of personal accomplishment may be gained.

Working hours showed positive correlation with burnout. Using Spearman correlation test we obtained significance in Emotional exhaustion (p value= 0.001) and depersonalisation (p value= 0.0001). Similar positive correlation was obtained between night duties per month and burnout.

Aside from particular work settings, several job-related variables also affect the degree to which clinicians may experience burnout symptoms. As hours worked per week increased, personal accomplishment decreased, and emotional exhaustion and depersonalization increased. This finding is contrary to studies by Vredenburgh et al. (1999) and Lippert (2000), which report elevated feelings of personal accomplishment with increased client contact hours per week. The effect of hours worked per week transcends work setting and holds true for all clinicians, although it is unclear how the way in which those hours are spent may affect symptoms of burnout.

Conclusion and Acknowledgement

Burnout in our study is less compared to other studies but it is more severe among young doctors. Our findings allowed to outline a risk profile for burnout syndrome., namely male, young doctors, who are unmarried and lives in a nuclear family with more number of working hours per week and night duties per month are prone for burnout syndrome. Clinicians new to the field and those at higher risk for experiencing symptoms of burnout should consider adopting self-care measures and collegial supports to prevent further deleterious effects. These may include but are not limited to increasing awareness of the signs and symptoms of burnout through education, self- awareness, and supervision.

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Institutional Ethical Committee issues expedited approval for all student research projects in this institution. IRC :P35/2024 Date:19/06/2024

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