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PREVALENCE OF BURNOUT IN HEALTH PROFESSIONALS OF A PUBLIC SECTOR MEDICAL COLLEGE OF AZAD KASHMIR PAKISTAN; A CROSS-SECTIONAL STUDY

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Abstract

Burnout, a state of mental physical and emotional exhaustion, is a common issue affecting health professionals. It can adversely affect the health and performance of medical personnel ultimately hindering the care provided to patients and education imparted to students. The phenomenon of burnout needs more research to understand the problem and its solutions specific to the cultural, religious, social and economic context of Pakistan.

This is a cross-sectional research to study the prevalence of burnout among clinical and preclinical faculty of Mohtarma Benazir Bhutto Shaheed Medical College Mirpur Azad Kashmir and its teaching hospital (Divisional Head Quarters Teaching Hospital Mirpur Azad Kashmir). One hundred and twenty-four subjects participated in this study from the departments of medicine, surgery, gynaecology and obstetrics, paediatrics and preclinical departments. Participants were included using voluntary response sampling.

Results showed an overall burnout rate of 47%. A gender difference was observed with females showing a higher burnout rate of 51% versus 33% in males. Burnout rate was the highest in junior doctors approaching 64% in house officers, 48% in post graduate trainees and 15% in consultants. Lower burnout rates were observed in those exercising regularly, not doing resident on calls and living at home.

Our study showed that the junior doctors working in our hospital are facing alarmingly high rates of burnout probably due to the high workload and emotional stresses. More such studies need to be done to verify and expand on the problem identified in our study. Moreover, interventional studies are

required in the Pakistani context to find cost effective solutions for this major problem plaguing our junior doctors.

Introduction

Burnout is defined as "a state of mental fatigue resulting from a person's professional life" (Freudenberger, 1975). This is a syndrome of stress characterized by emotional exhaustion, depersonalization or lack of empathy and a reduced sense of professional accomplishment (Maslach et al., 2001). Emotional exhaustion is a state of feeling drained due to stress and tiredness from professional duties leading to an inability to cope. Depersonalization is the development of a cynical and negative attitude towards others with a lack of empathy. Personal accomplishment refers to a sense of progress and growth.

Research has proved that burnout has a high prevalence among practicing and training physicians which negatively affects their own health as well as the medical outcomes of their patients. Moreover, the personal growth and learning of physicians is also impacted along with the learning of their students (Shanafelt et al., 2015).

Medical practitioners face significant challenges including high workloads, emotional burdens, immense responsibilities, high stakes, and the potential for catastrophic outcomes resulting from errors. (Privitera et al., 2014). It is not then surprising that these stresses become overwhelming for health professionals leading to burnout. There is a high prevalence of burnout reported in majority of the studies worldwide; ranging from 0-87%. Such a high level of burnout among health professionals is putting themselves, their patients and their students at risk (Rotenstein et al., 2018).

Studies for the prevalence of burnout in Pakistan have also shown a high prevalence of burnout, the highest estimates being 78% (Khalid et al., 2021).

Burnout is being extensively studied globally, however, there is room to explore this phenomenon in the Pakistani context in more detail. Being a third world country on the brink of economic and political meltdown, it is imperative that research is carried out on the prevalence of burnout in health professionals, its causative factors and interventions to mitigate it.

We conducted this cross-sectional study at Mohtarma Benazir Bhutto Shaheed Medical College and its affiliated hospital, Divisional Headquarters Teaching Hospital Mirpur Azad Kashmir. This study marks the first of its kind in Azad Kashmir, providing a unique opportunity to investigate burnout prevalence. Furthermore, considering the unprecedented economic and political circumstances in the country, this research will offer valuable insights into the influence of these national factors on burnout prevalence, if any.

Materials & Methods

In this study, we used a cross-sectional design. The participants were chosen based on voluntary response sampling as all clinical and preclinical health professionals were invited. Those who responded from the departments of medicine, surgery, gynaecology and paediatrics and the preclinical faculty were included. Written approval was taken from the ethical committee of the hospital on 05 May 2023. Informed consent was obtained from each participant.

The Maslach Burnout Inventory was used as a proforma to assess the burnout level of the physicians. This is the most widely used validated research tool to assess burnout level in literature (Hodkinson et al., 2022). This proforma collects scores in three domains of emotional exhaustion, depersonalisation and personal accomplishment and classifies the participants in each domain as high, moderate or low.

In literature, different criteria have been used to decide if a participant is burnt out. (Rotenstein et al., 2018). In our study, we have used one of these criteria whereby Individuals were considered burnt out if they got a high score in emotional exhaustion and either a high score in depersonalisation or a low score in personal accomplishment.

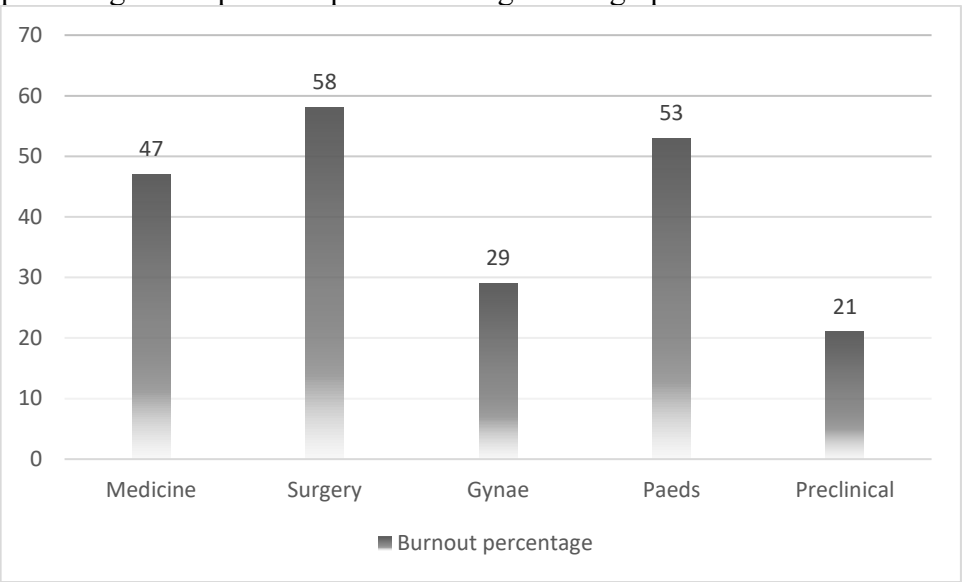
Data was also collected on the basis of gender, age, department, marital status and on call frequency. We used Chi-Square Test of Independence to see if the differences observed were statistically significant.

Results

In total, 124 participants filled the proforma and became a part of the study. Mean age was 29 years; 74% (92/124) were females. There were 47 house officers, 13 consultants and 48 post graduate residents. 45 participants were from the surgical department, 34 from medicine, 14 from gynae, 17 from paediatrics and 14 from preclinical departments.

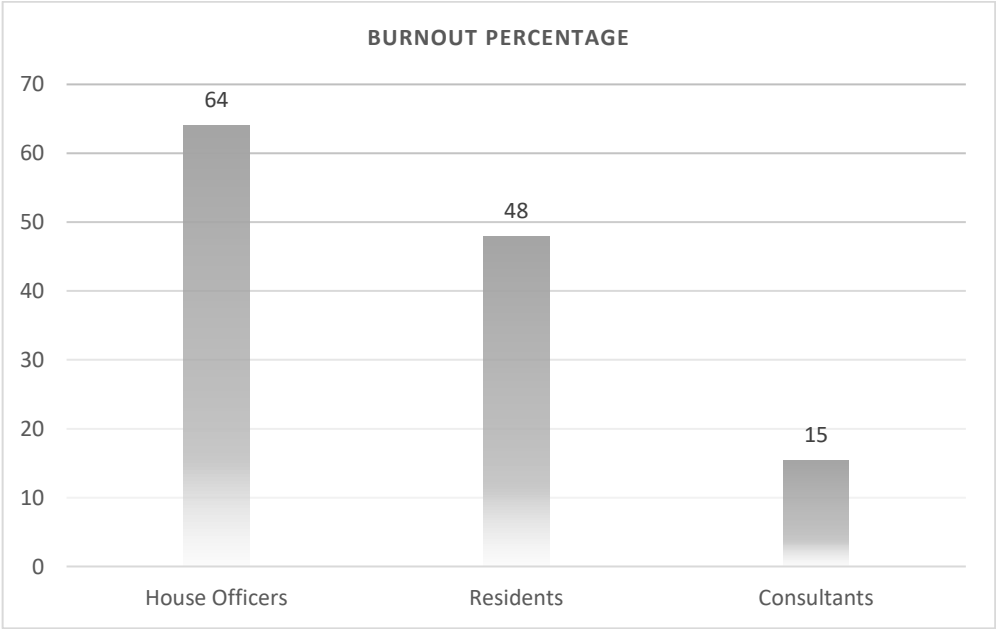
The burnout level was 47 % (58/124) in all participants; 50% (55/110) in clinical and 21% (3/14) in preclinical specialities. The difference between these the rates of burnout among clinical and preclinical specialities was significant, X2 (1, N = 124) = 4.07, p = .044.

The burnout percentage in respective specialities is given in graph 1.



Graph 1: Percentage of burnout in different departments

The mean scores in emotional exhaustion, depersonalisation and personal accomplishment were 29, 13 and 28 respectively. 34% (11/32) of males and 51% (47/92) of females were burnt out; this was not statistically significant (p = 0.10). The highest level of burnout was seen in the house officers at 64% (30/47) followed by post graduate trainees at 48% (23/48) and consultants were the least burnt out at 15% (2/13); see graph 2. This was a statistically significant difference; X2 (2, N = 108) = 9.88, p = 0.007.



Graph 2: Percentage of burnout in different grades of physicians

Our results showed that those who were exercising at least once a week or more, had a lower rate of burnout at 33% (13/39) versus those that were exercising less than once a week at 51% (40/79); this

was not statistically significant (p = 0.07). As expected, those doctors who were doing non-resident on calls had a lower rate of burnout compared to the ones who were doing resident on calls (Table 1). Living in hostel was also associated with a higher rate of burnout (Table 2).

On calls	Number	Burnout	%	P value
Resident	90	51	57	X2 (1, N = 122) = 13.63, p = 0.0002
Non resident	32	6	19	

Table 1: Percentage of burnout among physicians doing resident and non-resident on calls

Living in	Number	Burnout	%	P value
Hostel	56	32	57	X2 (1, N = 121) = 3.54, p = 0.06
Home	65	26	40	

Table 2: Percentage of burnout among physicians living in hostels and in homes

Discussion

Our study showed that the physicians working in our hospital and medical college are suffering from an alarmingly high rate of burnout. The overall burnout rate of 47% is in line with previous studies worldwide. This is a high rate of burnout given that we have used a more stringent criteria for defining burnout compared to many other studies (Rotenstein et al., 2018).

As shown in previous studies, we also saw that the junior doctors had a higher prevalence of burnout compared to the consultants (Bari et al., 2019). This could be due to the number of hours that the junior doctors have to work. Junior doctors in Pakistan have also been facing a lot of problems regarding high workload, lack of proper training and career counselling, low salaries and uncertainty regarding career progression. These might be the reasons for the high rate of burnout among house officers and post graduate residents (Hasan et al., 2020).

The department of surgery had the highest rate of burnout at 58% while the preclinical specialities had the least prevalence of burnout at 21%. This confirms previous results from studies elsewhere which show that the doctors working in the surgery department are likely to experience burnout more than other specialities (Low et al., 2019). Gynaecology and obstetrics department showed a low rate of burnout at 29% but this was probably due to a higher percentage of consultant participants in gynaecology and obstetrics at 29% compared to the overall percentage of 12% giving the gynaecology and obstetrics department a lower level of burnout.

Those physicians whose duties included resident on calls had a significantly higher rates of burnout compared to those who had non-resident on calls. This is completely understandable since it has been established that burnout is directly proportional to the workload (Rodrigues et al., 2018).

Previous studies have shown a higher rate of burnout among those who do not exercise and those who live in hostels (Ahmad et al., 2018; Youssef, 2016). Our study also showed similar trends however the differences did not reach statistical significance probably because of a smaller sample size.

Conclusions

Burnout in physicians, especially junior doctors is a serious issue that needs to be dealt with. Special consideration needs to be given on improving the working conditions of our junior doctors in the hospitals. Their work load needs to be managed. They have to be supported to relieve the excessive stress which is causing such a high rate of burnout for this vital part of the medical fraternity.

We are well aware of the fact that we live in a resource strapped society and we have to find low-cost interventions to alter the personal and system factors in order to lower the burnout rates in our junior doctors specifically and the overall medical profession generally. For this purpose, Interventional controlled studies should be carried out in Pakistan to find appropriate solutions.

Limitations

Our study had some limitations due to resource and time constraints. Sampling technique was not random. Study participants were majority female. The number of participants from different departments were not similar making the comparisons difficult. The sample size was small and it was only a single centre study making it difficult to generalize the data in the country.

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