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PREVALENCE OF BURNOUT SYNDROME AND ITS IMPACT ON QUALITY OF LIFE: A CROSS-SECTIONAL STUDY

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ABSTRACT

Background: Burnout Syndrome is a condition that arises from prolonged exposure to high workload stress, distinguished by depersonalization, emotional exhaustion, and curtail personal accomplishment. Medical Officers face a significant challenge with burnout syndrome, being particularly susceptible to psychological distress and stress-related issues. Consequently, burnout adversely impacts the quality of life, leaving individuals feeling drained and unable to perform their duties effectively.

Objective: The objective of the study is to evaluate the prevalence of Burnout Syndrome and its impact on the quality of life in medical officers.

Methodology: A cross-sectional survey was carried from February 17, 2014 to June 17,2024 in 8 significant hospitals of Faisalabad. Sample size of 111 individuals had been taken on account of inclusion criteria (Participants who had working experience of more than 1 year with working hours of more than 8 hours per day and age between 24-40 years) and exclusion criteria (congenital disorders, post-traumatic stress disorder, diagnosed depression or anxiety, previous medication use, or non-clinical roles) using purposive sampling technique. A questionnaire containing a socio-demographic scale, Maslach Burnout Inventory and SF-36(QOL scale) had been used. For statistical analysis SPSS version 26 had been used.

Results: The results revealed that the prevalence of Burnout was high in all domains of Maslach Burnout Inventory and it had a negative impact on quality of life of Medical officers .The correlational analysis between the levels of burnout in its all three component and quality of life was p=0.01 indicating the results as significant.

Conclusion: The study concluded that there was a significant presence of Burnout Syndrome among Medical officers and its detrimental impact on quality of life.

Key words: Burnout syndrome, Medical officers, Quality of life, MBI.

Introduction:

The health and wellness of the healthcare providers, along with pervasive influence of their mental health on the safety of their patients, has captured so much attention in the recent years. Although concept of the burnout syndrome among healthcare professionals is not recent, but it has become a critical issue in the healthcare industry nowadays. The relentless pressures of the clinical work, the time constraints, the competing demands, the lack of control over the work processes and schedules, along with the challenging roles and associations with the leadership, it all contribute to the problem. Burnout syndrome, increasingly recognized in the field, affecting a significant number of nurses, physicians, physical therapists, nurse practitioners, and physician assistants is a threat to safety of both the healthcare professional and the community in which they are functioning [1].The notion of Burnout Syndrome (BOS) in healthcare and medicine first appeared in the latter part of the 1960s, initially serving as a method to describe emotional and psychological stress faced by the clinic staff that is caring for the vulnerable patients in the free clinics [2].The symptoms of Burnout Syndrome include changes in the immune function and other endocrine systems, leading to high allostatic load in the body, the functional brain changes, the neuroexcitotoxicity, the suppression of the immune system, the metabolic syndrome, and the cardiovascular disease. BOS is a multifaceted condition, arising from a wide range of social, cultural, and professional factors and not manifesting in a single form [3].Maslach and Jackson introduced a standard scale to quantify the level of burnout known as Maslach Burnout Inventory (MBI) which is used to interpret and estimate the severity of burnout. This scale covers majorly three aspects, named as , the emotional exhaustion, the depersonalization (negative or cynical attitudes toward patients), and the lack of feeling of personal accomplishment at work [4].It is the prominent issue in the contemporary globalized working environments and has amplified significantly over the past

one decade. It is more common in medical officers, nurses, surgeons and other Allied health medical professionals such as physical therapists, radiologists, psychologists and medical lab technicians etc. but it can also be present in teachers, janitors, maids and bankers etc [5,6].Medical officers and residents have long working hours of duties. The constant exposure of medical officers to death, suffering, and disability significantly challenges their emotional stability. Sources of stress for residents and medical officers stem not only from their demanding hospital work but also from the typical demands of young age , such as being separated from their parents, forming new committed relationships, and raising their very own children [7].Quality of life (QOL) measures had became a crucial and more required component of healthcare outcomes assessment. Healthcare professionals must clearly differentiate it from functional status, symptoms, disease processes,and or treatment side effects.It can be defined as "a vast range of human experiences that is related to overall well-being of an individual" [8].A meta-analysis that was performed in a study to rule out the relationship between the gender and burnout and it was found that there are gender specific properties that lead to different levels of the burnout as women are more prone to emotional exhaustion while male individuals were more prone to depersonalization [9].In relation to the marital association some of the studies suggested married or committed individuals were more likely to suffer from emotional exhaustion than unmarried individuals. In contrast, some of the renowned studies implied that the married individuals had a more sense of fulfilment that unmarried that can be due to the support and care they receive from their partners. There were also some contradictory findings regarding the children as some encourage the presence of children can reduce the level of burnout and other stress related disorders while some of them suggest that having children can increase the risk of stress related disorders and burnout [10].Several studies also underlie the association with certain personality traits and burnout as some individuals have the natural capability to cope with stress than others [11].This study examined the prevalence of burnout

among medical officers, exploring how extended working hours and the emotional strain of patient care heighten the risk of burnout. Highlighting the impact on their quality of life , this research aimed to inform the targeted interventions, ultimately that fosters a resilient and more healthy medical workforce capable of delivering optimal care and enhancing well-being of the community. Beyond the theoretical understanding, this study reaches into the practical realm by identifying the physical therapeutic needs of participants affected by burnout. It is a holistic approach, acknowledging that quality of life of medical officers is intricately linked to both psychological and physical well-being.

Material and methods:

A cross-sectional study was conducted from 12thApril,2024- 12th June,2024 [12]. Non-Probability Purposive sampling technique was employed in the current study [13].A sample of 111 individuals from which 45 were males and 66 were females was collected from the Allied Hospital 1, Allied Hospital 2, Faisal Hospital, FIC (Faisalabad Institute of Cardiology), Aziz Fatima Hospital, Sahil Hospital, MTH, Chiniot Hospital of Faisalabad region in Pakistan. Medical officers included in the study had more than 1 year of working experience, were aged 24 to 40 years, and worked more than 8 hours per day, regardless of gender. Individuals were excluded if they had congenital disorders (e.g., Duchenne muscular dystrophy, Multiple Sclerosis), post-traumatic stress disorder, diagnosed depression or anxiety, previous medication use, or non-clinical roles (administrative, research, or teaching without direct patient care). Initially a written informed consent was obtained from all participants, who were informed about the study. Data was collected using the tools that are the sociodemographic questionnaire screens factors like education, housing, job, insurance, and income [14].The Maslach Burnout Inventory, a standard scale for measuring Burnout Syndrome, covering the domains of emotional exhaustion, depersonalization, and

personal accomplishment. It has 22 items rated on a 7-level Likert Scale, with a sensitivity of 92.2% and a specificity of 92.1% [15].The Medical Outcome Study Questionnaire Short Form 36 Health Survey (SF-36) assesses quality of life through 36 questions, yielding 8-scale scores, including physical and mental health summary measures, with a sensitivity of 74% and a specificity of 81% [16].Data was analysed using IBM SPSS version 26. Association was analysed between the domains of MBI and total value of quality of life which was measured by SF-36 scale. A letter of data collection had been gained from the University of Faisalabad.Consent had been gained from the Head of the Department of Physical Therapy.One other consent form had been gained from the participants, to assure that their data was only used for research purpose, description of study was given before taking consent.Privacy and confidentiality of participants had been preserved.Provision of all information to the participants had been provided regarding this study in effective way like what had been the benefits of this study.This study was conducted according to The Revised APTA code of Ethics for the Physical Therapist [17].

Results:

The results presented in this section provide insights into prevalence rates of BOS among the medical officers and examine the relationship between burnout syndrome and various domains of quality of life. Out of total 111 participants 45 were male and 66 were female. The results for sociodemographic questionnaire are described as follows. The majority of participants had an MBBS degree (83, 74.8%) followed by those with higher degrees like FCPS (28, 25.2%). Most participants lived in their own house (49, 44.1%) or with family (43, 38.7%), followed by rented house (8, 7.2%), with friends (5, 4.5%), no permanent residency (4, 3.6%), and occupying without payment (2, 1.8%). Most participants paid their healthcare bills out-of-pocket (104, 93.7%), followed by those using private insurance (3, 2.7%) and those with other coverage (4, 3.6%). Most

participants worked full-time (101, 91.0%) with shifts of 50-60 hours per week, while a smaller number worked part-time (10, 9.0%).The results for the income of the participants indicated that the highest frequency of participants have a total income of Rs. 80,000-90,000 per month. 51 participants scored high, 46 scored moderate and 14 scored low as in the component of emotional exhaustion. 74 participants scored high, 26 participants scored moderate and 11 participants scored low in the component of depersonalization. While 10 participants scored high, 13 scored moderate and 88 participants scored low in the component of personal accomplishment.

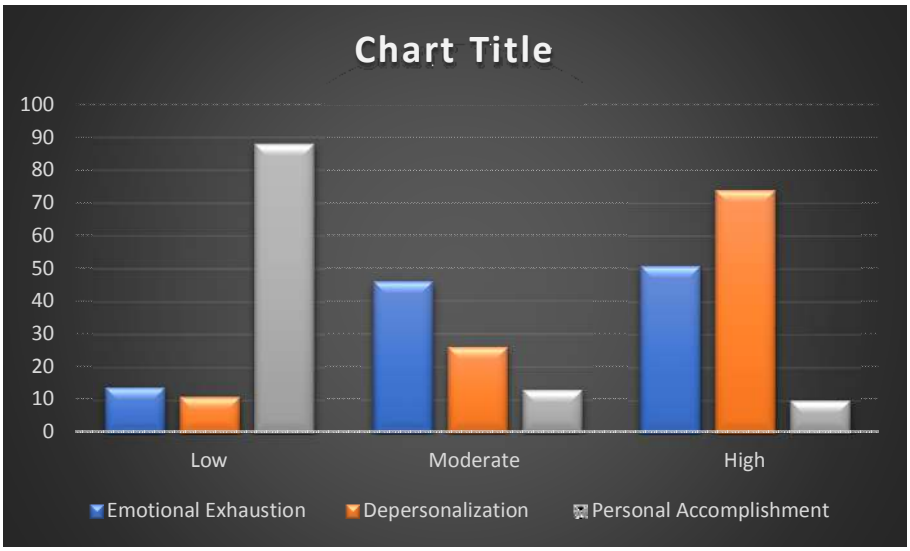

Figure 1: Prevalence of different domains of MBI among medical officers

Table 1: Non-parametric correlation between the three domains of MBI and quality of life score of medical officers.

		Emotional Exhaustion (MBI)	Depersonalization/loss of empathy (MBI)	Personal accomplishment assessment (MBI)	Total quality of life at SF_36 score
Emotional Exhaustion (MBI)	Correlation Coefficient	1.000	.506**	.084	-.064
	Sig. (2-tailed)	.	.000	.382	.507
	N	111	111	111	111
Depersonalization/loss of empathy (MBI)	Correlation Coefficient	.506**	1.000	-.099	-.063
	Sig. (2-tailed)	.000	.	.304	.510
	N	111	111	111	111
Personal accomplishment assessment (MBI)	Correlation Coefficient	.084	-.099	1.000	-.199*
	Sig. (2-tailed)	.382	.304	.	.036
	N	111	111	111	111
Total quality of life at SF_36 score	Correlation Coefficient	-.064	-.063	-.199*	1.000
	Sig. (2-tailed)	.507	.510	.036	.
	N	111	111	111	111

Correlation was significant at the 0.01 level (2-tailed).The current study indicated that burnout syndrome is a prevalent condition among medical officers and it did have a significant impact on their quality of life as there lied a negative correlation between each component of MBI and quality of life , indicating that the more high the level of burnout the less the quality of life of an individual.

Discussion:

The current study consisted of 111 medical officers among which 45 individuals were male and 66 were females. The study concluded that the burnout syndrome was a prevalent condition among the medical officers of the major hospitals of Faisalabad region in Pakistan. The level of burnout syndrome as calculated by the Maslach burnout inventory was high in all domains with being more high in the

domain of emotional exhaustion and depersonalization with a slightly low score in the domain of personal accomplishment. When the correlation was analyzed with the Quality of life of individuals which was calculated using the SF-36 scale it was documented that the level of burnout was negatively associated quality of life of participants as the increase in level of burnout was decreasing the quality of life of participants. As results of this study concludes that the burnout syndrome is a prevalent condition among medical officers and it does have a negative impact on their quality of life.

A cross sectional research on house officers in Myanmar was conducted in 2018 suggesting that burnout syndrome was a prevalent issue among house officers and that the reward was the only thing that lowers the level of burnout among the house officers [18]. Another study of 1095 healthcare professionals from five major hospitals in Girona, Spain, examined the link between burnout levels and quality of life using the Maslach Burnout Inventory and the SF-36 health questionnaire. Results indicated that healthcare workers had worse health-related quality of life than the general population, particularly in mental health [19].A study conducted on Burnout in United States healthcare professionals in 2018 suggested that burnout syndrome as an epidemic of 21st century for the healthcare professionals which did not just affected their health and wellness but also affected the health of their patients [20]. These forementioned studies supports as an evidence for the current study as burnout being a prevalent condition among health care professionals. A study conducted on junior doctors in first year in 2014 on the mental health, quality of life, burnout and heart rate variability described that there were no problems associated to their mental health, quality of life, burnout and heart rate variability, evidencing burnout as not a prevalent problem in such a population [21].This study defies the results of the study under discussion which suggests that burnout is a prevalent condition in medical doctors. In conclusion, the prevalence of burnout syndrome among medical officers is a prominent issue significantly impacting their quality of life. The findings highlight the urgent need

for interventions to address the issue of burnout in healthcare settings to improve the well-being and performance of medical professionals. Addressing factors contributing to burnout, such as excessive work hours and high stress, can lead to better health outcomes for both healthcare providers and their patients. Ensuring a robust support systems and promoting healthy work-life balance are crucial steps in mitigating burnout and enhancing the quality of life of medical officers.

Conclusion:

In conclusion, the current cross-sectional study highlights the significant presence of burnout syndrome among medical officers and its detrimental impact on their quality of life. Burnout, characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment, negatively impacts medical officers' physical and mental health, job satisfaction, and interpersonal relationships.To control these effects, healthcare organizations must implement systemic changes, provide mental health support, and promote interventions that lead to resilience-building. Future researches can focus on long-term studies to evaluate the effectiveness of these interventions and consider the demographic variables to better understand risk factors of burnout. Addressing burnout syndrome comprehensively will enhance well-being of the medical officers and improve the patient care quality.

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