

**Title: KPK physicians' contentment with their jobs**

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**Abstract**

**Objective:** Assess physician and student burnout and job satisfaction at KPK physicians. Analyze the differences in workplace barriers according to designation and gender. Identify the systemic factors affecting career opportunities and mental wellbeing.

**Method:** 218 participants in a cross-sectional research conducted at KPK from January to May 2025. Employed validated surveys on job satisfaction, burnout, and worries. Furthermore this Data was analyzed using ANOVA (SPSS v26) and t-tests with a significance level of  $p < 0.05$ .

Result: Males were more inclined to remain in Pakistan ( $p=0.027$ ), whereas females felt less workplace security ( $p=0.002$ ). Burnout ( $1.47\pm0.50$ ) and anxiety about unemployment were highest among medical students ( $p=0.009$ ). Salary discontent did not differ by gender ( $p=0.566$ ).

Conclusion: At kpk, hierarchy and gender have a big influence on job satisfaction. Workplace safety precautions and mental health support are urgently needed. The results are consistent with issues related to physician well-being in resource-constrained environments worldwide.

Keywords: Physician burnout, Gender disparities, Workplace security, Job anxiety, Pakistan healthcare

Introduction: In contemporary healthcare systems around the world, the health and job satisfaction of healthcare workers—especially doctors and medical students—have become crucial concerns (West et al., 2018). With major ramifications for patient care and employee retention, burnout—which is typified by emotional tiredness, depersonalization, and diminished personal accomplishment—has been widely observed among medical professionals (Maslach et al., 1996). Additional stresses like job uncertainty, low pay, and difficult work situations make these difficulties worse in low-resource nations like Pakistan (Sipos et al., 2024). Developing focused treatments to raise physician morale and enhance healthcare delivery requires an understanding of these dynamics. The relationship between systemic problems and professional satisfaction at Medical institutes is still poorly understood. According to recent international research, different degrees of burnout and job unhappiness are caused by hierarchical systems and gender imbalances in medical institutions (Canadian Medical Association, 2022; Spilg et al., 2022). Female doctors, for example, frequently encounter particular obstacles, such as harassment at work and uneven chances, which can affect their career paths and mental health (Shanafelt et al., 2021). Similarly, scholastic constraints and uncertain job prospects cause early-career professionals, including house officers and medical students, to experience higher levels of stress (Dyrbye et al., 2020). These problems have been made worse by the COVID-19 pandemic, which has revealed weaknesses in healthcare systems and increased stressors such resource constraints and patient overload (Goldberg et al., 2024; Frenkel et al., 2022). Training hospitals like BKMC/MMC, HMC, KTH, LRH, STH etc are disproportionately affected by these demands in Pakistan, where the healthcare system is already under stress. In order to address burnout and foster resilience, studies from similar contexts highlight the necessity of institutional support, leadership involvement, and policy changes (Hu et al., 2024; Carlasare et al., 2024). To customize solutions to these institutions' unique requirements, regional data is essential.

With an emphasis on gender and designation-based disparities, this study looks at the degree of professional satisfaction and future-related worries among physicians and medical students at kpk. We want to uncover important stresses and their correlates by examining factors like joblessness fear, wage satisfaction, and workplace security. Our results are placed in the worldwide literature on physician well-being, highlighting particular difficulties in settings with limited resources while drawing comparisons with research from high-income nations (Gumas et al., 2024; Ladonna et al., 2022). By incorporating insights from recent studies on leadership, resilience training, and organizational support (Spilg et al., 2022; Heidinger et al.,

2023), we offer practical strategies to improve working conditions, ultimately aiming to inform policy recommendations for physicians at kpk, advocating for structural changes that enhance professional fulfillment and reduce burnout. The findings add to the growing body of evidence on physician well-being in low-resource environments, highlighting the urgency of addressing these issues to sustain a robust healthcare workforce.

**Method and materials:**The Mardan Medical Complex (MMC) and Bacha Khan Medical College (BKMC) in Mardan hosted this cross-sectional study between January and May of 2025. Medical students, house officers, trainee medical officers (TMOs), medical officers (MOs), and consultants who were actively involved with BKMC/MMC and other KPK hospitals during the study period were all included in the study population. To guarantee widespread participation, a standardized, self-administered questionnaire was delivered both in-person and electronically. Using validated scales modified from previous research on physician well-being, the questionnaire evaluated important variables such as burnout levels, workplace security, joblessness fears, professional satisfaction, and remuneration satisfaction. Those who gave their informed consent and were currently enrolled or employed at BKMC/MMC and other hospitals at kpk were included in the study. Eligible participants included house officers finishing their rotations, medical students of all academic years, and doctors (TMOs, MOs, and consultants) actively engaged in clinical or academic settings. Non-clinical employees, those on prolonged leave, and those who refused to fill out the survey were among the exclusion criteria. 218 people in all fulfilled the requirements for inclusion, and their answers were anonymised to maintain privacy. Descriptive statistics (means, standard deviations) and inferential tests (independent t-tests for gender comparisons, ANOVA for designation-based differences) were used in the analysis of the data using SPSS version 26.  $*p < 0.05$  was the threshold for significance, and effect sizes ( $\eta^2$ ) were computed for noteworthy results. The institutional review board of BKMC/MMC granted ethical approval in accordance with the principles of the Helsinki Declaration. The removal of non-respondents and possible response bias were two of the study's shortcomings that could have an impact on generalizability.

Result:

**TABLE 1: PROFESSIONAL SATISFACTION & FUTURE CONCERNS AMONG BKMC/MMC DOCTORS/STUDENTS (N=218)**

variables	Male(n=170) Mean±SD	Female(n=48) Mean±SD	P-value	sig
Workplace security	1.41±0.49	1.67±0.48	0.002	yes
Work in pak future	1.75±0.44	1.58±0.50	0.027	yes
Jobless concern	1.32±0.47	1.27±0.45	0.537	no
Stress/burnout	1.44±0.50	1.35±0.48	0.316	no
Sallary satisfaction	1.84±0.37	1.88±0.33	0.566	no
Future improvement	1.64±0.48	1.67±0.48	0.764	no

**Table 2: Professional Satisfaction & Future Concerns Among BKMC/MMC Doctors/Students (N=218)**

variables	Medical student(n=165) Mean±SD	TMOS(n=41) Mean±SD	houseofficer(n=9) Mean±SD	P-value	sig
Workplace security	1.53±0.50	1.24±0.44	1.33±0.50	0.014	yes
Work in pak future	1.69±0.46	1.80±0.40	1.89±0.33	0.027	yes
Jobless concern	1.35±0.48	1.12±0.33	1.22±0.44	0.009	yes
Stress/burnout	1.47±0.50	1.20±0.40	1.44±0.53	0.008	yes
Sallary satisfaction	1.82±0.38	1.98±0.16	1.89±0.33	0.008	yes
Future improvement	1.58±0.50	1.88±0.33	2.00±0.00	<0.001	yes

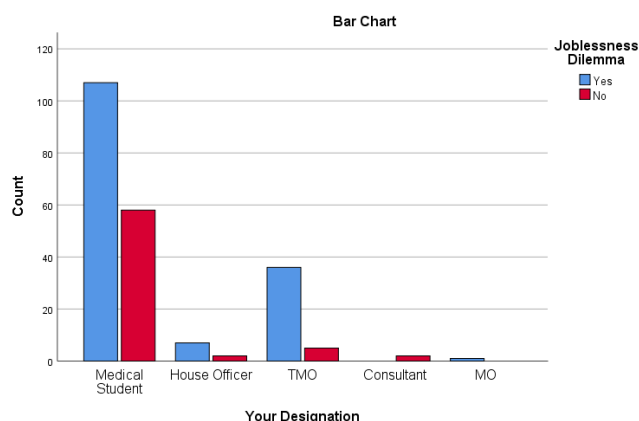
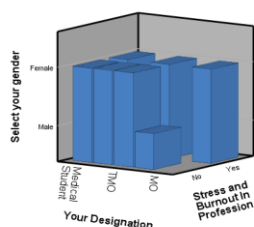


Fig 1: jobless dilemma Concerns about unemployment were most prevalent among medical students (107 Yes, 58 No), followed by TMOs (36 Yes, 5 No). There were 218 participants (151 Yes, 67 No), with less responses from House Officers (7 Yes, 2 No) and other participants (Consultants: 0 Yes, 2 No; MOs: 1 Yes, 0 No).,The Likelihood Ratio ( $\chi^2 = 15.087$ ,  $*p^* = .005$ ) confirmed the substantial connection found by the Pearson Chi-Square test ( $\chi^2 = 13.389$ ,  $*p^* = .010$ ). However, 50% of cells had anticipated counts  $<5$ , suggesting that small sample numbers in some categories should be interpreted with caution.

Simple 3-D Bar of Select your gender by Your Designation by Stress and Burnout In Profession



## Discussion:

The study finds that among BKMC/MMC and other KPK hospital physicians, there are notable gender differences in terms of job security and future career goals. In line with global trends revealed by the Canadian Medical Association (2022), which emphasizes how structural injustices and harassment risks disproportionately affect women in medicine, female participants reported feeling less comfortable in their work environments ( $p=0.002$ ). Male doctors, on the other hand, were more likely to intend to stay in Pakistan ( $p=0.027$ ), which may be a result of gendered social norms or disparities in the chances they perceive elsewhere. Shanafelt et al. (2021) related leadership behaviors to organizational values alignment and burnout mitigation, and these findings support the necessity for institutional policies addressing workplace safety and retention measures targeted to gender-specific concerns. The highest levels of stress and burnout were reported by medical students (Mean=1.47±0.50), with significant differences seen by professional designation. This is in line with Maslach's Burnout

Inventory framework (1996), which notes that early-career professionals are especially at risk because of their demanding schedules and lack of independence. Despite experiencing job uncertainty (Mean=1.12±0.33 for joblessness), TMOs showed lower burnout (Mean=1.20±0.40), which may have been caused by their better clinical experience. Spilg et al. (2022) also noted that resilience improves with tenure. As Ladonna et al. (2022) address in their investigation of physicians' resistance to wellness interventions, survivorship bias may be reflected in House Officers' optimism about future improvements (Mean=2.00±0.00), as those who are still enrolled in training programs may be more robust. Gender-specific salary dissatisfaction was widespread (Male=1.84±0.37; Female=1.88±0.33;  $p=0.566$ ), reflecting worldwide patterns of physician unhappiness with pay, especially in public health systems (Gumas et al., 2024). Because their transitional roles provide clearer development opportunities, TMOs had the highest salary satisfaction (Mean=1.98±0.16), according to the designation-based analysis. This contrasts with the lower satisfaction of medical students (Mean=1.82±0.38), which is consistent with the findings of West et al. (2018), who found that one of the main causes of trainee burnout was financial strain. In order to reconcile compensation with effort and inflation, reforms similar to those suggested by Sipos et al. (2024) are necessary, as the lack of gender inequalities points to structural problems in pay structures. These trends might be made worse by the COVID-19 pandemic's aftereffects. According to Goldberg et al. (2024), burnout was associated with pandemic-induced anxiety and depression by primary care providers, which may account for the high stress levels among our study's medical students. Furthermore, our participants' worries with infrastructure limits were similar to those of Heidinger et al. (2023), who observed that ICU physicians experienced moral distress amid resource shortages (Hospital Infrastructure Limitation: Medical Students=1.27±0.45). To address these issues, Frenkel et al. (2022) highlighted coping mechanisms that could be institutionalized, such as peer support. Crucial elements are organizational support and leadership. Our conclusion that TMOs, who frequently operate under structured supervision, reported lower stress was supported by Dyrbye et al. (2020), who showed that positive residency leadership behaviours linked with reduced burnout. Hu et al. (2024) made the case for giving doctors agency in order to lessen burnout; this strategy is pertinent to the situation at BKMC/MMC. The relevance of organizational support in pandemic-era professional fulfilment was further highlighted by Carlasare et al. (2024), who also suggested that focused treatments (like Spilg et al.'s SMART program, 2022) could improve resilience. Systemic reforms are needed to address these multifaceted pressures, including fair workplace practices and mental health resources that guarantee career-stage-specific support and gender parity.

**Conclusion:** Gender and professional designation have a substantial impact on job security, fatigue, and career satisfaction among BKMC/MMC physicians, according to the study. Targeted interventions, including as leadership development, equitable policies, and resilience training, are necessary to address these issues and create a positive, long-lasting workplace. Institutions can reduce burnout and increase professional contentment by putting evidence-based measures into practice, which will eventually improve healthcare delivery.

Conflict of interest: None

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