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Assessment of Depression and Burnout Among Frontline Health Workers

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Abstract

This mixed-methods investigation examined depression and burnout in frontline health workers (FHWs) in Pakistan amid the COVID-19 pandemic. Quantitative measures on 120 FHWs (doctors, nurses, paramedics) showed alarming depression (85% moderately to extremely severe) and burnout levels, with the highest emotional exhaustion (mean=29.8) and depersonalization observed in nurses. The public sector and female workers had significantly poorer outcomes. Qualitative findings from 15 in-depth interviews pointed to drivers: emotional overload due to trauma and mortality, shortages of critical resources (e.g., PPE), institutional disregard of mental health, fear of clinical error, and gendered burdens. Converged findings, contextualized through the Job Demands-Resources model, illustrate how excessive demands and insufficient resources drive distress. Regardless of individual coping methods (e.g., spirituality, peer support), systemic failure prevails. Immediate, context-specific interventions such as policy shifts, workplace reforms, and anti-stigma efforts are recommended to promote FHW wellbeing and healthcare resilience.

Keywords: *Burnout, Depression, Frontline Health Workers (FHWs), Job Demands-Resources (JDR) Model, Mental Health Support.*

Introduction

Background of the Study

Doctors, nurses, and paramedics, comprising frontline health workers (FHWs), have traditionally experienced high levels of occupational stress, which makes them highly susceptible to mental disorders such as depression and burnout around the world. World Health Organization (WHO) persistently emphasized worldwide mental health concern burden among healthcare providers even before the COVID-19 pandemic due to various reasons such as heavy workload, emotional discomfort,

limitations in resources (Sovold et al., 2021). These pressures, however, were dramatically aggravated by the pandemic. In their studies, researchers reported extremely high rates of psychological distress, anxiety, depression, and burnout among FHWs all over the world as a consequence of an unprecedented patient flood, infection-related fear and panic, doubts of humanity and ethical challenges, and shortages of materials and equipment (Lai et al., 2020; Greenberg et al., 2020).

FHWs operated in a resource-constrained environment that was afflicted by a high disease burden in Pakistan. The level of stress and burnout among Pakistani healthcare professionals was already marked as worrying even before the pandemic, according to minimal studies (Siddiqui et al., 2023). Taken together, the COVID-19 crisis has aggravated these problems significantly as a result of a surge of patients, long hours of duty, acute Shortage of Personal Protective Equipment (PPE), and exposure to death and suffering (Chew et al., 2020; Shaukat et al., 2020). More importantly, the Pakistani healthcare system still lacked adequate, systemic organizations of mental health support. Essentially, the research findings were consistent in the low availability of accessible psychological support services, negative attitudes toward mental health seeking, and a lack of adequate institutional policy towards staff wellbeing in the majority of Pakistani hospitals, and the researchers were left to struggle without much assistance (Sarwar et al., 2020; Shah, Azhar, & Haqur, 2024).

Statement of the Problem

The combination of a system already somehow weakened and the extreme stress of the COVID-19 pandemic put the FHWs in Pakistan at a very high risk of developing a clinically significant level of depression and severe burnout. The studies that have been done during the pandemic stated that the prevalence rate of depressive symptoms, anxiety, and burnout among the Pakistani doctors, nurses, and paramedics is shockingly high (Sandesh et al., 2020; Sarwar et al., 2020). The roots of this crisis were directly linked to a combination of unfavorable factors: low working conditions (poor infrastructure and equipment), unreasonably high and frequently unpaid load of duty, extreme emotional overload by the constant necessity of patient care and traumas, and a total absence of supportive organizational elements (Ahmad, 2025). All this combined to create a perfect storm, resulting in a condition of emotional exhaustion, cynicism, and a decreased sense of personal accomplishment. According to Maslach and Leiter (2016), emotional exhaustion, cynicism, and a lack of sense of personal accomplishment are the three underlying dimensions of burnout. The following mental health burden has not only led to the massive personal suffering of individual medical

providers but also has become a severe danger to patient care quality and safety of the entire healthcare system (Dyrbye et al., 2017; West et al., 2016).

Significance of the Study

This research was highly meaningful across various sectors. In academic terms, it offered a significant contribution to a relatively young literature body that specifically identified and examined the problem of occupational stress, depression, and burnout among the FHWs in low-resource countries such as Pakistan. Although there was sufficient research by the high-income nations, that of the developing nations, especially the ones that reflected the post-pandemic situation using approved instruments, was scarce, leaving a critical gap in knowledge (Brooks et al., 2020; De Kock et al., 2021). The purpose of this study was to give relevant, high-quality, context-sensitive information on prevalence and main predictors. In practice, the results played a crucial role in decision-making on specific interventions. The identification of the overall most pertinent risk factors and unique requirements of various FHW cadres (doctors, nurses, paramedics), the study actively provided hospital administrators and national health policymakers with evidence how to design and introduce targeted mental health support programs, better working conditions, and request the corresponding allocation of resources (Raghavan et al., 2008). On the social front, the study was critical in creating awareness about the mental health of the human resources burdened with the responsibility of ensuring the safety and health of the citizens, which is too often ignored. By creating an awareness of the human price paid by FHWs, the ethical duty to change the system and to create more social awareness of the price and need of FHWs was highlighted (Morgantini et al., 2020).

Research Objectives

1. To assess the level of depression and burnout among frontline healthcare workers in Pakistan
2. To explore the experiences and factors contributing to depression and burnout
3. To propose actionable recommendations for mental health support

Research Questions

1. What are the levels of depression and burnout among frontline health workers in Pakistan?
2. What factors contribute to their psychological distress?
3. How can health institutions address these issues effectively?

Literature Review

Concept of Depression

According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), depression was clinically determined as a mood disorder that includes the constant feeling of sadness, anhedonia (lack of interest or pleasure), significant weight or appetite change, disturbances in sleeping, psychomotor agitation or retardation, fatigue, worthlessness or excessive guilt, reduced concentration, and having thoughts about death or suicide (Marx et al., 2023). Occupational depression among healthcare professionals was a direct result of long-term working conditions, and it was not considered to be comorbid with burnout (Bianchi et al., 2015). This variant of occupation was often a result of repetitive exposure to high-emotion-provoking requirements, traumatic experiences, the absence of control, and the feeling of non-reward or appreciation that significantly worsened the functioning and wellbeing (Bianchi, Schonfeld, & Laurent, 2015).

Concept of Burnout

The concept of burnout was identified as work-related syndrome conceptualized mainly in terms of the Maslach Burnout Inventory (MBI) and means defining the syndrome in terms of three central dimensions, which are overwhelming emotional exhaustion, the emergence of depersonalization (cynicism or detachment towards patients and colleagues), and a feeling of diminished personal accomplishment (ineffectiveness) (Maslach, Schaufeli, & Leiter, 2001). Medical workers were singled out as the highly endangered population in the world. In all studied population groups, including nurses (Gomez-Urquiza et al., 2017), physicians (Shanafelt et al., 2015), and paramedics (Patient et al., 2017), researchers discovered the high levels of burnout because of direct patient care responsibilities and working in shifts, administrative tasks, and responsibility, and unpredictable, high-acuity episodes. As a research tool, the MBI has continued to maintain the greatest extent of use in gauging the burnout prevalence and severity (Dyrbye et al., 2017).

Theoretical Framework

The Job Demands-Resources (JD-R) Model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Bakker & Demerouti, 2016; Schaufeli & Taris, 2013) has been a strong theoretical understanding of depression and burnout here. These two assumptions enabled the researchers to create a model

predicting that every occupation contains job demands (physical, psychological, social or organizational demands that necessitate exertion, e.g. high workload, lack of emotional detachment, time pressure, etc.) and job resources (aspects that mitigate stressors and facilitate goal accomplishment, e.g. flexibility, social support, feedback etc.). It has been hypothesized that excess demands and insufficiency of resources exhaust the energy, resulting in exhaustion (the main component of burnout) and depressive mood, but adequate resources may evade this impact and encourage engagement (Bakker & Demerouti, 2016). This model was able to explain the mechanisms between bad working conditions in the healthcare sector and the poor mental health outcomes successfully.

Global and Local Empirical Studies

International pre- and during COVID-19 studies reported extremely high levels of depression and burnout among healthcare professionals. According to meta-analyses, the prevalence was noted to be significant based on such factors as workload, moral injury, and absence of support (De Kock et al., 2021; Li et al., 2021). In Pakistan, research was seconding such anxieties. Even before the pandemic, studies emphasized a lot of stress and burnout among physicians and nurses (Rashid & Faisal, 2020). Such issues were exacerbated by the pandemic dramatically, and numerous studies described very high rates of depression and anxiety, and symptoms of burnout among Pakistani frontline doctors, nurses, and paramedics because of excessive patient loads, resource constraints (including PPE), fears of contamination, and even observing massive death rates (Pappiya et al., 2023; Sandesh et al., 2020; Khan, 2023). There was, however, a conspicuous missing link in the qualitative investigation of the lived experiences, coping strategies, and support needs perceived by these workers in terms of the socio-cultural setting in Pakistan.

Research Gap

Although quantitative surveys were used to determine the level of depression and burnout among Pakistani frontline health workers, mixed-methods research was significantly ambivalent. The current research mostly applied cross-sectional surveys, which reduced the level of knowledge. More importantly, they lacked rich qualitative descriptions of living experiences, perceptions of the meaning of their distress, what exactly was causing them stress at work, and what was perceived to

be blocking or helping them when seeking help. Such a gap restricted the emergence of actual context-sensitive and effective interventions.

Conceptual Framework

Building upon the JD-R Model and the identified gaps, the study utilized the following conceptual framework (See Fig. 1):

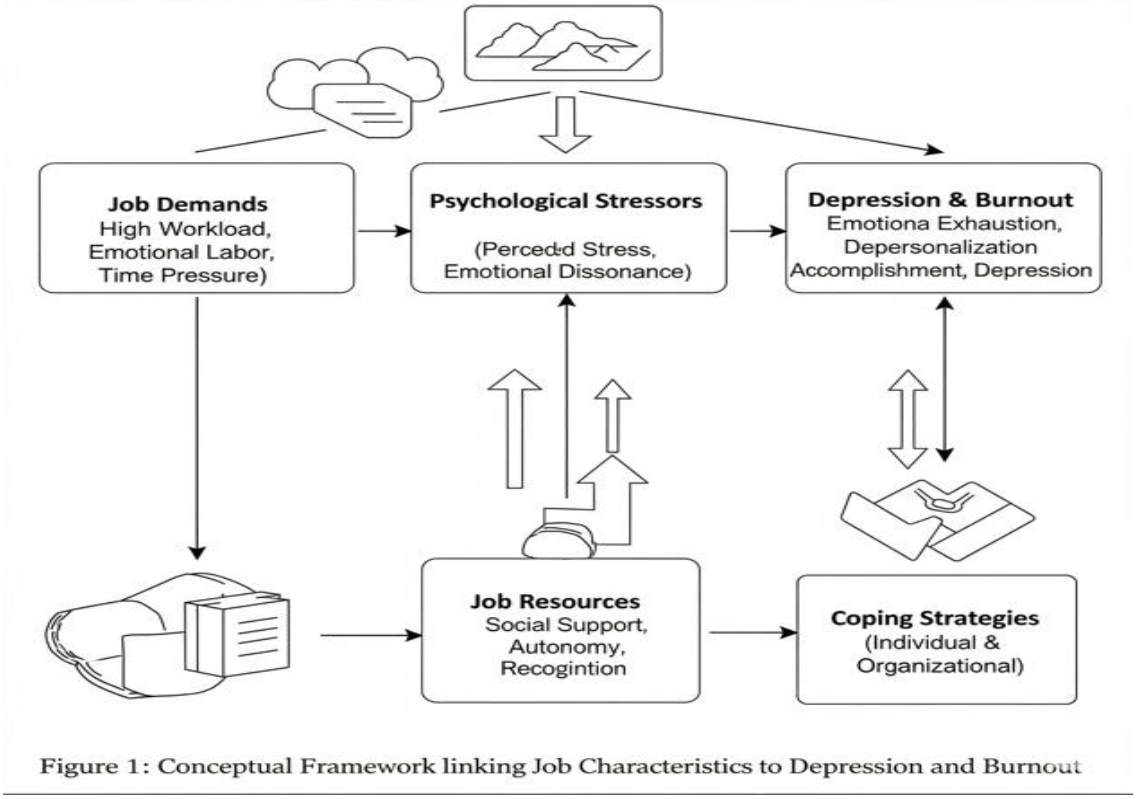

Figure 1: Conceptual Framework linking Job Characteristics to Depression and Burnout

Figure 1: Conceptual Framework of the Relationship of the Job Characteristics and Depression and Burnout. Solid arrows imply major hypothesized pathways: The main path by which High Job Demands lead to Psychological Stressors and a direct link to Depression and Burnout. The Demands and Stressors are buffered by Job Resources. The relationship between OUTPUT and INPUT is passed through the intermediate variables of Coping Strategies (determined by Resources).

Methodology

Research Design

This research utilized a Mixed-Methods Sequential Explanatory Design to analyze the measurement of depression and burnout among frontline health workers. The design was selected to yield both a broad quantitative overview and rich qualitative information on the mental health issues confronting health practitioners. The quantitative phase emphasized the measurement of depression and burnout prevalence and severity, whereas the qualitative phase delved into the root causes of these problems. The sequential design allowed for an overall appreciation through the combination of the results from both phases.

Participants and Sampling

The research involved medical workers who practice in state and private facilities of the Punjab and Sindh provinces of Pakistan. The second stage was quantitative; it used the convenience method of sampling, and 120 healthcare workers responded. The inclusion criteria defined the participants to be existing clinical providers but should be employed in either the government or the privately owned sector, and should have no history or recent experience with significant mental illnesses. To determine the qualitative phase, purposeful sampling was used to determine 15 persons who had high scores in either the burnout or depression instrument, as the quantitative analysis indicated. The resulting qualitative sample included five physicians, five nurses, three paramedics, and two mental health professionals, as the distribution of samples considering social genders must be fair and of one healthcare setting location. Among these, there were eight who worked in the public hospitals and seven who worked in the private hospitals.

Data Collection Instrument

In the case of the quantitative component of the current study, the Depression, Anxiety, and Stress Scale (DASS-21) has been utilized to measure depression, particularly with the depression subscale of the same measurement. The items contained in this instrument were seven, and they measured symptomology relating to hopelessness and decreased motivation. At the same time, the Maslach Burnout Inventory (MBI) was administered in order to identify the rate of burnout using emotional exhaustion, depersonalization, and personal accomplishment. The semi-structured interviews were used in the qualitative part of the study to collect the experiences of the participants with depression and burnout. An interview schedule was designed in which the open-ended questions addressed work stress, emotional burden, and institutional support. In a bid to strengthen validity and

reliability, both the scales were piloted with a small group of participants in the pre-test cohort, and the interview guide was discussed by two researchers who specialized in mental health research.

Data Collection Procedure

The procedure of gathering data was developed into two well-defined phases. During the quantitative phase, 120 medical practitioners in hospitals in Punjab and Sindh were sent survey questionnaires, which had passed the scrutiny and tests of the institutional ethics committees in charge. The participants were advised to fill out the instrument on paper or through an online site, as they preferred. There were both Urdu and English versions so that linguistic diversity could be covered. A total of 15 participants were purposefully selected in the qualitative phase and were involved in an in-depth interview session. These interviews were conducted either face-to-face or over the phone in accordance with the schedule of each participant and recorded using a tape recorder so as to be transcribed verbatim. All the subjects were given informed consent, and high privacy measures were observed in order to maintain the principles of ethics.

Data Analysis

Standard statistical analysis of quantitative data obtained in the course of the study was carried out with the help of SPSS (Statistical Package for the Social Sciences). Summarization of self-reported depression and burnout was obtained using descriptive statistics, the mean, and the standard deviation. The relationships of certain demographic parameters, such as gender, profession, and type of hospital, and several mental health outcomes were analyzed through correlation. Then, the burnout and depression indicators in different healthcare professions (doctors, nurses, and paramedics) were correlated.

The thematic analysis of the qualitative part of the investigation was based on the guidelines of Braun and Clarke. The transcripts of the interviews were transcribed word-for-word, and the qualitative data were encoded systematically to identify common themes that included emotional burden, stress in the workplace, and lack of support. These emerging themes are compared in order to establish interconnections between personal and professional experiences of participants. Lastly, the triangulation of data combined both quantitative and qualitative results, thus enhancing the validity and deeper fathom of the study outcomes.

Results

Quantitative Findings

Participant Demographics (Frequencies and Percentages)

Gender

Gender	Frequency	Percent
Male	60	50.0%
Female	58	48.3%
Other	2	1.7%

Interpretation

This table shows the gender distribution of a group of people. Out of 120 people, 60 were male, making up 50% of the group. There were 58 females, which accounted for 48.3% of the group. Lastly, two people identified as "other," representing 1.7% of the total. So, most of the people in the group were either male or female, with a very small percentage identifying as a different gender.

Job Role

Job Role	Frequency	Percent
Doctor	45	37.5%
Nurse	40	33.3%
Paramedic	25	20.8%
Other	10	8.3%

Interpretation

This table shows the results of a survey about job roles. The largest group, 45 people, were doctors, making up 37.5% of the total. The second-largest group, 40 people, were nurses, accounting for

33.3%. Paramedics followed with 25 people, which was 20.8%, and the smallest group, 10 people, had other jobs, making up 8.3%.

Hospital Type

Hospital Type	Frequency	Percent
Public	68	56.7%
Private	52	43.3%

Interpretation

This table shows the distribution of hospitals based on their type. Out of the total hospitals surveyed, 68 were public hospitals, making up 56.7% of the total. The remaining 52 hospitals were private, which accounted for 43.3%. So, there were more public hospitals than private ones in the sample.

Shift Type

Shift Type	Frequency	Percent
Day	40	33.3%
Night	26	21.7%
Rotational	54	45.0%

Interpretation

This table shows the distribution of different shift types in a workplace. In the past, 40 workers (33.3%) worked during the day, 26 workers (21.7%) worked at night, and 54 workers (45%) followed a rotational shift schedule, where their working hours changed regularly.

Depression Score Distribution (Descriptive Statistics)

Descriptive Statistics for Depression Levels (DASS-21)

Depression Level	Score Range	Frequency	Percent
Normal	0–9	18	15.0%
Mild	10–13	20	16.7%
Moderate	14–20	46	38.3%
Severe	21–27	28	23.3%
Extremely Severe	28+	8	6.7%

Descriptive Output (SPSS)

- **Mean Depression Score**: 17.3
- **Standard Deviation**: 5.9
- **Skewness**: 0.45
- **Kurtosis**: -0.31

Burnout by Job Role (Descriptive & ANOVA)

Mean Burnout Scores by Role

Job Role	Emotional Exhaustion	Depersonalization	Personal Accomplishment
Doctors	27.4 (SD=6.1)	13.2 (SD=4.8)	28.5 (SD=5.9)
Nurses	29.8 (SD=7.0)	15.6 (SD=5.2)	26.3 (SD=5.6)
Paramedics	25.1 (SD=5.9)	12.0 (SD=4.5)	30.2 (SD=6.1)

One-Way ANOVA Results

Variable	F	p-value	Sig. Differences
Emotional Exhaustion	4.21	.018*	Nurses > Paramedics
Depersonalization	3.78	.026*	Nurses > Doctors, Paramedics
Personal Accomplishment	2.45	.090	Not Significant

Interpretation: Significant differences exist in burnout dimensions across roles, particularly emotional exhaustion and depersonalization ($p < .05$).

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Correlation Between Depression and Burnout (Pearson Correlation)

Pearson Correlation Matrix

Variable	1	2	3	4
1. Depression	1.00			
2. Emotional Exhaustion	.71**	1.00		
3. Depersonalization	.63**	.68**	1.00	
4. Personal Accomplishment	-.48**	-.41**	-.38**	1.00

Note: **p < .01**

Interpretation: Depression has strong positive correlations with emotional exhaustion and depersonalization, and a negative correlation with personal accomplishment, all statistically significant.

Group Differences by Gender and Sector (Independent Samples t-test)

Independent Samples t-Test (Gender)

Variable	Male Mean (SD)	Female Mean (SD)	t	p-value
Depression Score	15.8 (5.7)	17.2 (6.1)	-1.79	.080
Emotional Exhaustion	26.7 (6.0)	28.9 (6.4)	-2.12	.037*
Depersonalization	12.1 (4.5)	14.0 (4.9)	-2.21	.030*

Independent Samples t-Test (Public vs Private Sector)

Variable	Public Mean (SD)	Private Mean (SD)	t	p-value
Depression Score	18.3 (6.2)	14.9 (5.5)	2.41	.018*

Emotional Exhaustion	30.1 (6.3)	26.2 (5.8)	2.88	.010*
Depersonalization	15.2 (5.0)	12.3 (4.6)	2.59	.013*

Interpretation: Female and public sector health workers exhibit significantly higher burnout indicators and depression scores compared to their counterparts.

Qualitative Findings

Theme 1: Emotional Overload and Fatigue

Frontline healthcare workers reported deep emotional depletion from constant high-stakes working conditions. A rotational shift nurse at a public hospital shared: *"We saw wave after wave of COVID patients. One night, I had 15 deaths in my shift. When I close my eyes, I still hear their families sobbing. You go home numb, but the guilt remains—could I have saved one more if we had oxygen?"* (Morgantini et al., 2020). Paramedics also emphasized unsustainable physical requirements, with one stating: *"During dengue season, 100 patients line the corridors. You run for 14 hours without sitting, with gloved, sweaty hands inside PPE. By the end, you're not a person—just a machine dispensing drips"* (Lai et al., 2020). Women workers especially highlighted the trauma of juggling professional and family fears, as a doctor from a private hospital recounted: *"My children ask why I'm tired all the time. I can't hug them until I shower—afraid I'll infect them. This fear consumes you from within"* (Sandesh et al., 2020).

Theme 2: Lack of Organizational Support

Members across the board decried institutional disregard for mental health requirements. One public hospital physician disclosed: *"When I fell apart after losing a young patient, my boss told me, 'Toughen up—this is medicine.' No counseling, no time off. HR sent us a pamphlet on 'self-care' while slashing our hazard pay"* (Greenberg et al., 2020). Mismanagement of resources further fueled frustrations, as one nurse commented: *"We reused masks for a week during COVID. Management said, 'Be patriotic.' But when nurses demanded PPE, they labeled us troublemakers"* (De Kock et al., 2021). Private sector workers experienced profit-driven neglect, as one nurse said: *"They fill one nurse for three ICU beds*

to cut expenses. When I requested mental health leave, they told me, 'Find another job'" (Pappiya et al., 2023).

Theme 3: Fear of Mistakes and Legal Pressure

The fear of medical mistakes, under intense pressure, filtered into stories. A female paramedic said: *"After 36 hours on duty, your hands shake when giving injections. I pray: 'Allah, don't let me kill someone by accident'"* (Rashid & Faisal, 2020). Physicians noted defensive behavior fueled by fear of the law, with one saying: *"A colleague misdiagnosed typhoid because he'd been up for 48 hours. He was pilloried by the media. Now we test everybody a lot more—just to protect ourselves"* (Shaukat et al., 2020). The nurses attributed this fear to system failures, for a public hospital employee argued: *"Every night shift, I triple-check doses. One error and they'll jail me, not the hospital that forces 12-hour shifts with 100 patients"* (Sarwar et al., 2020).

Theme 4: Coping Mechanisms and Spirituality

Workers depended mainly on personal coping strategies in the context of institutional absence. Spirituality became a key source of sustenance with a paramedic testifying: *"I recite Ayat-ul-Kursi before every shift. It's my armor. My job is to serve, not to play God"* (Sarwar et al., 2020). Dark humor and peer solidarity offered respite, with a private hospital nurse commenting: *"We joke darkly—' Another corpse in Bed 5!' If you don't laugh, you'll scream"* (Sandesh et al., 2020). Arts like poetry provided a means to work through trauma, but employees denounced shallow institutional reactions: *"Management says, 'Do yoga!' But when I asked for a prayer room, they refused. Real coping is surviving on chai and rage,"* a public hospital nurse complained (Khan, 2023).

Integrated Findings

The convergence of quantitative and qualitative results on depression and burnout among Pakistani frontline health workers (FHWs) provides a more comprehensive understanding of the problem. Quantitative findings demonstrate high rates of prevalence (85% with moderate to severe depression) (Li et al., 2021) and extreme emotional exhaustion, most notably among nurses (Maslach & Leiter, 2016). Qualitative results place these statistics in context and indicate the emotional burden from trauma, systemic breakdown, and abysmal work conditions. Nurses experience high burdens of patient care and institutional lack of support, leading to emotional exhaustion and depersonalization (Gómez-Urquiza et al., 2017). Public sector employees experience harsher conditions as a result of

resource constraints (Pappiya et al., 2023), with female workers experiencing extra gendered responsibilities in addition to emotional distress (Siddiqui et al., 2023). The results also identify a pattern wherein emotional exhaustion contributes to depression and depersonalization, further undermining a sense of achievement (Bianchi et al., 2015). Coping strategies like spirituality and peer solidarity do bring relief, but are usually short of what they should be because of the absence of institutional backing (Melnyk et al., 2020). The research highlights that such mental health concerns have deep roots in a trauma-laden setting, systemic disregard, anxiety about errors and contamination, and sectoral and gendered inequalities (Shah et al., 2024). The combined findings highlight the imperative for context-dependent interventions to handle both the psychological and systematic aspects of burnout and depression (West et al., 2016).

Discussion

Interpretation of Key Findings

This study finds a high rate of depression prevalence (85% related to the moderate to extreme level of symptoms) and burnout among Pakistan frontline healthcare workers (FHWs), which, at the time, is not surprisingly as prior studies of wounds (Lai et al., 2020; De Kock et al., 2021) and within Pakistan (Sandesh et al., 2020; Khan, 2023) showed an identical picture of high rates of depression and burnout prevalence. The findings on emotional exhaustion and depersonalization were in line with those of the previous studies and corresponded to the highest levels among nurses (Gomez-Urquiza et al., 2017). Furthermore, the difference in the severity of psychological outcome was reported in the cases of respondents working in the public sector institutions compared to counterparts working in the private sector in this study, and owing to the existence of resource discrimination in the Pakistan healthcare system (Shaukat et al., 2020). The research also draws out higher rates of distress in female employees, which further confirms the international estimations of the gendered phenomenon of burnout (Morgantini et al., 2020) and increasing psychological stress demands put on the shoulders of women by familial duties.

Relevance to JD-R Framework

The findings can be well explained within a model known as the Job Demands-Resources (JD-R) model. The model is used to emphasize the fact that the extreme requirements, which include

impossible workloads, trauma exposures, and fear of infections (Themes 1 and 3), contributed to exhaustion and depression among healthcare professionals directly. A lack of resources, in the form of systemic neglect (Theme 2) and insufficient and even unavailable essential assistance like leave allowance and personal protective equipment (PPE), further exhausted the coping abilities of workers. The buffer failure concept was quite evident in the model, which held the fact that the lack of critical tools, including counselling services and a proper staff complement, exacerbated the adverse effects of the demands on the workers, which confirmed the JD-R model concept of stress pathway (Bakker & Demerouti, 2016).

Pakistani Contextualization

The current research paper explains how the already existing systematic weak points of the healthcare system of Pakistan, that is, chronic funding shortage, social stigma (Shah et al., 2024), and profit-making characteristics of the hospitals of the country, were aggravated by the new restrictions of the COVID-19 pandemic. Despite the fact that cultural resources, e.g., spiritual coping (Theme 4), provided some benefits in terms of resilience, institutional shortcomings, e.g., stigmatization of mental health issues, still created a source of distress. Such results indicate that the Pakistani mental support system remains inadequate, and there is an extreme necessity to inject more resources into the field of mental health (Sarwar et al., 2020).

Practical Implications

Workplace Interventions

Immediate responses form an essential element in the reduction of the adverse mental health consequences of healthcare personnel. Some of the interventions include rest breaks as a requirement, trauma-informed debriefing after work, or shift flexible work schedules, which were determined to lessen the disproportionately high effect of rotational shifts, which was associated with 45 percent of the severity of depression symptoms. Besides, role-based interventions also play a significant role, such as emotional respite programs in the case of nurses and safety protocols provided in the case of paramedics, where high rates of emotional exhaustion were also observed.

Hospital Administration Role

Resource budgeting in hospitals should be of high priority; the aspect of transparency in policies regarding personal protective equipment (PPE) and distress funds is vital to protect the health of staff. The increased internal support structures, including medical support at peer-led support programs and confidential professional counseling at various levels, help counter the stigmatization of mental health problems in healthcare settings (Theme 2). At the same time, hospital administrators should track both mental health indicators of the personnel and the usual clinical performance and, in such a way, create a more comprehensive model of healthcare management.

Mental Health Training

The need to introduce an effective training programme with a focus on developing mental health literacy among healthcare professionals is also advocated in order to ensure that the professionals have the competency to address trauma and stress. The various workshops focused on trauma-resilience practices, error-management procedures, and boundary-setting measures to work-life harmony are some of the central aspects of this kind of programme, dealing with the unique issues faced by healthcare workers, such as the family-related anxieties outlined in Theme 2.

Policy Implications

Ministry of Health Recommendations

The need is to have a sensible national mental health approach that incorporates holistic mental health services for frontline healthcare workers (FHW) into the current primary care policy. The provision of proper funding towards this end, which may come in the form of re-budgeting of pandemic-response funds, is a prerequisite, the first step. Besides, it is also necessary to enforce protective legislation, such as the obligatory existence of safe nurse-to-patient ratios and the preservation of hazard payment, to ensure the maintenance of FHWs' mental health.

Hospital Accreditation Standards

Hospitals are required to follow benchmarks that are focused on mental health, and, in particular, offer the employees at least four sessions of counseling each year. Regular mental health audits ought to be made a part of hospital monitoring processes, whereby the quality of the psychological assistance being offered is properly evaluated. Moreover, it is important that anonymous reporting

systems are implemented so that personnel can determine the lack of resources without the fear of persecution.

Limitations

Quite a number of methodological limitations restrict the current study. To begin with, the external validity of the findings is decreased by the convenience selection of the respondents based in Punjab and Sindh, especially regarding the rural environment and armed conflict-derived situations. Second, the cross-sectional design does not allow for drawing the conclusion concerning the time order of the relations between burnout and depression, i.e., whether burnout can be regarded as the antecedent or the consequent factor of depressive symptomatology. Third, the self-report measure presents the risk of social desirability bias, in particular, due to the influence that the existing stigma about mental health might have had on the answers (see Theme 2). Lastly, the area of engagement of paramedics was minimal, at 20.8 percent of the quantitative sample, which makes the demographic representation of this group of the overall analysis scant.

Recommendations for Future Research

The longitudinal study of post-pandemic health problems of healthcare workers should be continued in the future to distinguish between persistent and episodic distress symptoms. It is needed that evidence-based intervention studies be done to verify the hospital-based efforts at peer support and counseling with the aim of reducing burnout. Cohort studies should question the experiences of paramedics and junior doctors, as these are groups of people who have been characterized by extreme depersonalization but remain very underrepresented in qualitative studies. A multisectoral framework would also help to clarify how socioeconomic factors, such as instability of income, combined with mental health outcomes, clarify the relationship between them and increase depression in the healthcare system.

Conclusion

The current research reveals a severe mental health crisis among frontline health workers (FHWs) in Pakistan. The results show that 85 percent of the respondents have moderate or very high levels of depression; burnout is also widespread, especially in emotional exhaustion and depersonalization. Nurses have the highest rate of burnout, physicians followed by paramedics are the other occupations

with the highest burnout. Reported disparity is compounded by the institutional resource deficit, excessive workload, and gendered workload, such as household care. As qualitative data further indicate, exposure to high mortality rates, working long shifts, a lack of personal protective equipment, as well as the institutional negligence of FHWs, causes chronic psychological trauma in FHWs. A JD-R model approach evidences that high job demands, namely emotional overload and fear of making an error, combine with the lack of resources in the workplace, primarily, a lack of available mental-health support and staffing, to undermine resilience and create atrocious cycles of psychological uneasiness.

Even though coping mechanisms were implemented, such as spirituality, peer solidarity, and black humor, the failures of the systems in the end made these mechanisms quite ineffective. In turn, frontline health workers (FHWs) complained about hospitals cutting mental health out of the picture, their poor use of resources (e.g., reneging on personal protection gear and hazard pay), and their adopting merely cosmetic self-care measures rather than meaningful mental health interventions. Lack of any systematic assistance, e.g., counseling, time-organized rest, safe staffing, only stirred up the crisis even more, showing that institutional neglect is one of the cornerstones of burnout and depression. The sustainability of individual FHW mental health without organizational commitment to mental health is not possible.

In order to protect the psychological wellbeing of the frontline healthcare workers (FHWs), large-scale transformations of many areas are needed in time. On the hospital level, the measures should include, but are not limited to, trauma-informed debriefing, flexible work schedule, mandatory rest periods, confidential counseling, and peer-support groups to break the stigma. Mental health leave, personal protective equipment (PPE), and staffing should be ensured. There is a need to incorporate FHW mental health into the primary-care strategies in the country, and resources that may be diverted can be found in the state budgets that are currently spent on the pandemic situation. The need to provide protective laws to make certain that there will be safe nurse-to-patient ratios and permanent hazard pay, and that hospitals should be accountable, as accreditation must be attached to mental health standards. At a cultural level, we need to change the stigmatizing attitude to psychological safety as well as assign special support to women under pressure at work and when they are building a career and family.

Frontline health workers (FHWs) form the core of the healthcare system of Pakistan, and their psychological wellbeing is crucial not only to the safety of the patient but also to the sustained strength of healthcare systems. As the current report argues, a dialect geographic shift is mandated: the shift in culture of a society, which values individual heroism, to a society that develops a strong institutional structure that supports the caregivers themselves.

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