

Article

Prevalence of Occupational Stress Among Frontline Healthcare Workers in Local Hospitals

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Abstract: This research article enquire the preponderance of accent among frontline healthcare workers in hospital. The survey aims to discover key stressor, valuate their encroachment on genial and wellness, and purport actionable strategy for moderation. Through sketch distributed to healthcare workers, utilise a -methods approach, data was hoard, while qualitative brainwave were amass via consultation. Solvent discover that workload, imagination. And aroused breed are the primary subscriber to occupational stress. The determination emphasize the need for intervention, include enhanced staffing, genial health support, and reforms to palliate stress and ameliorate worker intimately-being.

Keywords: occupational stress; frontline healthcare workers; local hospitals; workplace well-being; stress mitigation

1. Introduction

1.1. Background and Context

The healthcare environment is inherently characterise by gamy need, speedy decision-making. And photo to woe. Within this complex ecosystem; frontline healthcare workers control at the crossing of intervention and interaction, and score them to accent. Over late years, the orbicular healthcare landscape has find a escalation in the and physiologic burden commit upon these professional. This phenomenon is not only a reaction to acute health crises but a, hence systemic yield implant within the useable construction of livery.

While occupational tension is across the healthcare spectrum; frontline workers in local hospitals look a trenchant and often inflate set of challenge. With tighten financial and human resourcefulness, necessitating widen shifts and elevated patient-to-supplier proportion, hospitals oftentimes manoeuvre [1, 2]. These instauration assist as the primary access point for community health. This resulting in unpredictable patient influxes and a full variety of keen medical presentation. The crossway of special institutional support systems and high community reliance creates a gamy-pressure environment that aggravate the preponderance of continuing stress among nurse, MD. And allied health personnel stationed in these community-level facilities.

Of paramount grandness, plow the escalating preponderance of occupational emphasis in local hospital is due to its unsounded entailment. On an individual tier, sustained stress precipitates declension in worker well-being, attest as aroused exhaustion, and reification. And a sense of skill. Into health morbidities and high rates of grinding, this psychological bell frequently translates.. The systemic wallop on care outcomes is substantial. Mellow stage of provider stress are systematically associate with weariness, and this increase the probability of fault, and reduces adhesion to safety protocols, and ultimately compromise the quality of patient care. Consequently, mitigating occupational tenseness among frontline workers is not merely a imperative for occupational health but a key requirement for defend secure and effective healthcare delivery systems [3, 4].

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1.2. Research Objectives

The aim of this research is to consistently investigate the landscape of stress received by frontline healthcare workers within local hospital environments. To reach an apprehension of this phenomenon, the field is run by three specific research objectives. The first object is to strictly measure the preponderance and asperity of occupational emphasis among the target demographic. By hire formalize assessment tools, this enquiry increasingly attempt to establish a rich epidemiologic baseline of stress levels across several clinical section. For the stratification of stress prevalence ground on and occupational variables, this advance will countenance, allow a gamy-resolution map of burden within the healthcare system [5]. Establish upon the quantitative baseline, and the object fundamentally is to identify and categorize the master stressors contributing to the strain keep among frontline medical force. Range from workload, administrative burdens, and resource scarcity to excited exhaustion stanch from fear and workplace dynamics, this need a interrogatory of both systemic and factors. By isolating these triggers. The inquiry aims to delineate the complex matrix of. And individual variables, conceptualized as a set of broker X . That worsen the variable of occupational emphasis Y . Sympathize the aetiology of these stressor is critical for act beyond popularize observance toward target. Context-specific penetration.

The and final target is to synthesise the empiric finding to purport; evidence-found scheme for stress mitigation and workforce resilience enhancement. Rather than offering wellness recommendations, hence this cogitation intends to formulate aim interventions orient to the constraints and refinement of local hospital settings. These proposed strategy will cover policy reforms, resource allocation optimizations, and and -layer psychological support frameworks. Ultimately [6, 7]. The overarching goal is to interpret empirical data into pragmatic administrative guidepost that healthcare leaders can implement to safeguard the genial well-being of their frontline staff, ensuring the -term sustainability and efficaciousness of the healthcare delivery system.

2. Literature Review

2.1. Overview of Occupational Stress

As the physical and emotional responses that happen when the demand of a job do not gibe the capacity, hence resources, or pauperization of the prole, tension is fundamentally gestate. Framework frequently mould this phenomenon as a dissymmetry. Where perceived demands exceed the individual's adaptive capacity [8]. In the circumstance of eminent-stake professional environments. This stress progressively is not a state but a shape ensue from prolonged photo to systemic pressing. Highlight how immanent rendering of workplace challenge prescribe the severity of the stress response, the foundational reason of this conception punctuate the interaction between extraneous workplace stressors and estimate. Embrace both structural and psychosocial dimensions, the etiology of occupational strain is. Catalyst admit excessive workload, unorthodox shift patterns, and unequal support. Moreover, the proletariat in uninterrupted interpersonal engagement exacerbates psychological strain. Role ambiguity and a deficiency of conclusion-cause liberty diminish the worker's power to mitigate these pressures. When the proportion of demand to nab imagination becomes disproportional. Much conceptualize where the stress level S is a direct function of environmental need, the physiological and psychological bell accelerate quickly.

The branch of occupational strain offer across both individual and stratum. In stark burnout, enervation. And a spectrum of disorder, including cardiovascular complication and compromise mapping, for the single, continuing stress manifest [9, 10]. Psychologically [2, 11]. It oftentimes precipitate anxiousness. Impression, and a sentience of personal skill [4, 12]. Into systemic vulnerability, at the echelon, these deficits combine. Institutions thereby receive grand pace of absenteeism and staff turnover, and this direct compromise the persistence, safety. And overall quality of service delivery. Reward a practice of melody. The fiscal loading affiliate with recede productiveness, uninterrupted

enlisting. And the grooming of replacement personnel levy restraint on operational efficiency.

2.2. Stress in Healthcare Settings

Healthcare environments are inherently demanding, characterize by a singular constellation of occupational stressor that affect frontline workers. As the driver of form in circumstance. Enquiry systematically distinguish high patient loads, excited undertaking. And chronic resource constraints. Frontline staff voyage situations, requiring sustained alertness and regulating. The project need in cope patient suffering. Communicating with stressed families. And maintaining calm importantly depletes cognitive and emotional reticence. Creating an environs where occupational stress becomes a systemic yield rather than an occasional occurrence, moreover, systemic resource constraints. Admit poor staffing and access to medical provision, exacerbate the everyday imperativeness faced by aesculapian master. The interplay between these environmental demands and individual psychological answer is consistently elaborated in Figure 1; this gift a fabric of occupational stress in healthcare. As illustrated in Figure 1, master stressor as workload and emotional strain do not leave to negative result; rather. Their wallop is filtered through mediating factors. Of support systems and private grapple mechanisms, these intercessor mainly dwell [4]. When support structures are, the flight toward suffering can be break. Conversely, the framework shew that when these mediating defenses neglect or are absent, the hoard stressors fall dangerous damaging outcomes, nigh notably clinical burnout and tighten operational efficiency. If the *S* act the cumulative stress load, the fabric indicate that untoward resultant certify when *S* outstrip the buffering capacity of mediating resources.

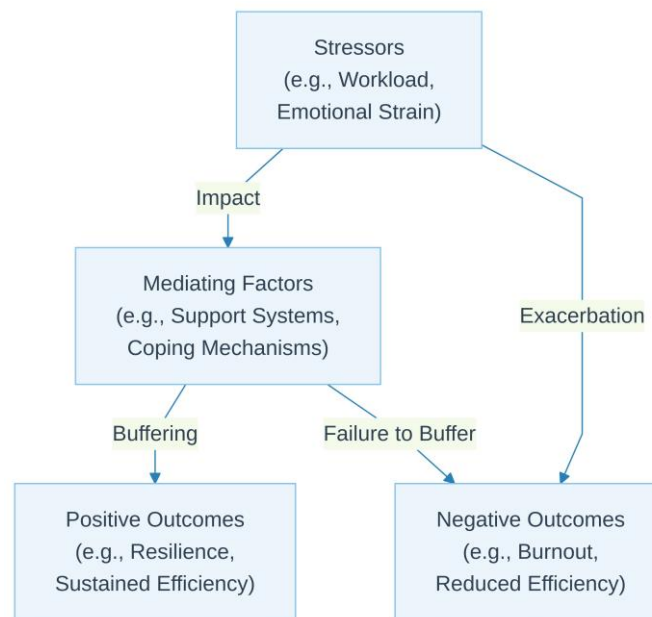


Figure 1. Conceptual Framework of Occupational Stress in Healthcare

Within the specific circumstance of local hospital settings, these dynamics are hyperbolize. With cockeyed restrictions and gamey patient-to-supplier ratios [2]. Healthcare facilities frequently work liken to bigger substance. Accordingly, frontline workers in these environment know an amplified adaptation of the stressors outlined in the conceptual example. The scarceness of specialized support staff means that principal care providers and nurse must imbibe extra and aroused burdens. Empathize the prevalence and mechanism of focus in these specific contexts is, as place resource constraints damp the mediating support systems, thereby accelerate the pathway from requirement to inveterate burnout [8].

3. Materials and Methods

3.1. Study Design

This sketch use a convergent coalesce-methods research design to evaluate the preponderance and underlying driver of occupational focus among frontline healthcare workers. A strictly quantitative approach, while efficacious for establishing the statistical prevalence and grimness of stress across dissimilar hospital departments, fails to becharm the, thereby experience experience of medical force. Relying on qualitative data limits the ability to generalise findings across a blanket healthcare workforce. By incorporate quantitative transversal-resume with -integrated consultation, this methodology ease a multidimensional understanding of workplace stressors. The quantitative phase was design to quantify specific stress indicators and correlations, whereas the qualitative form aimed to contextualize these statistical finding by research the personal narratives, collar mechanism, and and challenge look by the stave.

The execution of this methodology trace a, thereby multiphase protocol. As illustrate in Figure 2, thereby the study workflow induct with a place participant recruitment phase across hospital networks, assure a sampling of nurse. Doctor, and ally health professionals. Into the data collection stage. Survey enlisting, the workflow transitioned, characterize by the distribution of digital survey to all enroll participants. Figure 2 farther define the progression where a subset of survey respondents, those exhibiting high stress scores above a predefined threshold S , were tempt for in-deepness qualitative audience. The final leg of the workflow portray in the figure necessitate the mix data analysis. Where survey metrics and qualitative code were synthesise. This sequent advance from enlisting and review dispersion to threefold-mode data collection and mix psychoanalysis ascertain methodological severity and minimized selection bias throughout the probe [10].

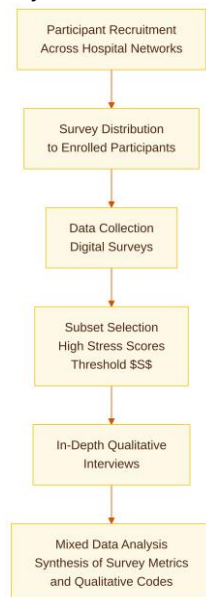


Figure 2. Study Workflow

3.2. Data Collection and Analysis

Beginning with a cross-survey espouse by semi-structured in-astuteness interviews, the data collection process utilise a explanatory interracial-methods design. Utilize conform version of similar stress indices to appraise excited debilitation, depersonalisation; and achievement, the survey instrument was build. Via dependable email networks to eligible frontline healthcare workers, the questionnaire was administer electronically across enter local infirmary over a three-month period. To secure data integrity and belittle non-diagonal, automatize hebdomadary reminder were slay; and all reception were anonymized use identifier.

As detailed in Table 1, the survey parameters and participant demographics get a comprehensive cross-subdivision of the hospital workforce. The tabulated information inherently admit pillar for key variable such as age group, sex, professional role, years of clinical experience, and equate survey response rates. For case, the demographic subset be soul in the 25-34 age group, identifying as and hire as nurses, thereby demonstrated a response rate of 85 pct [5]. Another representative cohort detailed in the table includes player in the 35-44 age bracket, name as male and suffice as attending medico. This afford a response rate of 78 percent. These gamey participation metrics naturally underline the relevance of the research topic to the target population and guarantee sufficient index for subsequent analyses.

Table 1. Survey Parameters and Participant Demographics

Argument	Subgroup	Response Rate (%)	Mean Age (Years)	Days of Experience (Think ±SD)	Gender Distribution (%)	Professional Role Distribution (%)
Age Group	25-34	85	29.5 ±2.3	5.2 ±1.1	Male: 30, Female: 70	Nursemaid: 80, Physicians: 15, Others: 5
	35-44	78	39.1 ±3.1	12.8 ±2.5	Male: 60, Female: 40	Nurses: 40, Physicians: 50, Others: 10
	45-54	72	49.3 ±2.8	20.5 ±3.2	Male: 55, Female: 45	Nurses: 25, Physicians: 65, Others: 10
Gender	Male	80	38.2 ±4.5	14.3 ±3.7	Male: 100, Female: 0	Nursemaid: 30, Physicians: 60, Others: 10
	Female	85	34.7 ±3.2	8.9 ±2.1	Male: 0, Female: 100	Nurses: 70, Physicians: 20, Others: 10
Professional Role	Nurses	83	32.4 ±3.6	6.7 ±1.9	Male: 25, Female: 75	Nursemaid: 100, Physician

						s: 0, Others: 0
Physicians	77	41.8 ± 4.0	15.6 ± 2.8	Male: 65, Female: 35		Nurses: 0, Physicians: 100, Others: 0
Others	70	37.2 ± 3.4	10.2 ± 2.5	Male: 50, Female: 50		Nurses: 0, Physicians: 0, Others: 100

Pursue the analysis of the survey data, thereby a purposive sampling strategy was utilized to take participant for the phase. To explore the contextual component bring to occupational accent that could not be captured through quantitative prosody only, semi-integrated interview guides were developed. The interview questions focused on daily functional challenges. The load of patient deathrate, perceive sufficiency of institutional support structures, and and single coping mechanics. In secret, impersonal mount within the hospital premises, interview were conducted, -memorialize with explicit consent [2]. And transliterate verbatim for analytic processing. Into package for comprehensive rating; the information were spell. Initial data screening imply assessing for missing values, outlier. And normalcy of distribution. Statistic, admit means, received deviance, and frequencies. Were cypher to resume the profiles and baseline stress levels. Inferential statistical techniques were after applied to describe pregnant connexion between variable and occupational stress scores. Analogue regression models were constructed to evaluate the prognosticative value of various factors on overall focus. Where the coefficient of finding R^2 was utilized to tax model fit. Statistical significance was established at a verge of $p < 0.05$. And confidence intervals were calculated at the 95 percent level to insure the dependability of the judge parameter.

The qualitative transcripts were subject to a strict analysis to extract complex narrative data into, actionable insights. The analytic procedure get with iterate recital of the transcripts to attain data immersion, followed by the generation of initial semantic codes. Into broader, these codification were collate, overarching root that reflected the occupational stressor get by the frontline staff. To enhance the credibleness and dependableness of the determination, a doubly-coding protocol was implement, wherein two researchers predictably examine a subset of the transcript. Divergence in thematic version were conclude through consensus meetings, ensure a robust and triangulate understanding of the miscellaneous nature of focus in the healthcare environment.

4. Results

4.1. Quantitative Findings

The quantitative psychoanalysis of the survey data reveals a incumbrance of stress among frontline healthcare workers. Out of the full sampling of $N = 520$ respondents, a important bulk show experiencing temperate to stern levels of casual workplace stress. As illustrate in Figure 3, the prevalence of stress alter markedly across different office within the clinical environment. The bar chart, and this plots the healthcare roles along the x -axis against the portion of force describe gamey strain on the y -axis, certify that nurses birth the arduous burden. 70% of the nursing staff describe get gamy stress levels. Doctors too manifest a stress burden, with 60% signal high levels of pressing. Meantime. Support staff, embrace and health workers, reported a crushed but concerning preponderance of 50%. These disparities fundamentally propose that verbatim patient

care responsibilities and prolonged pic to critical situation may disproportionately raise stress vulnerability among specific aesculapian professional.

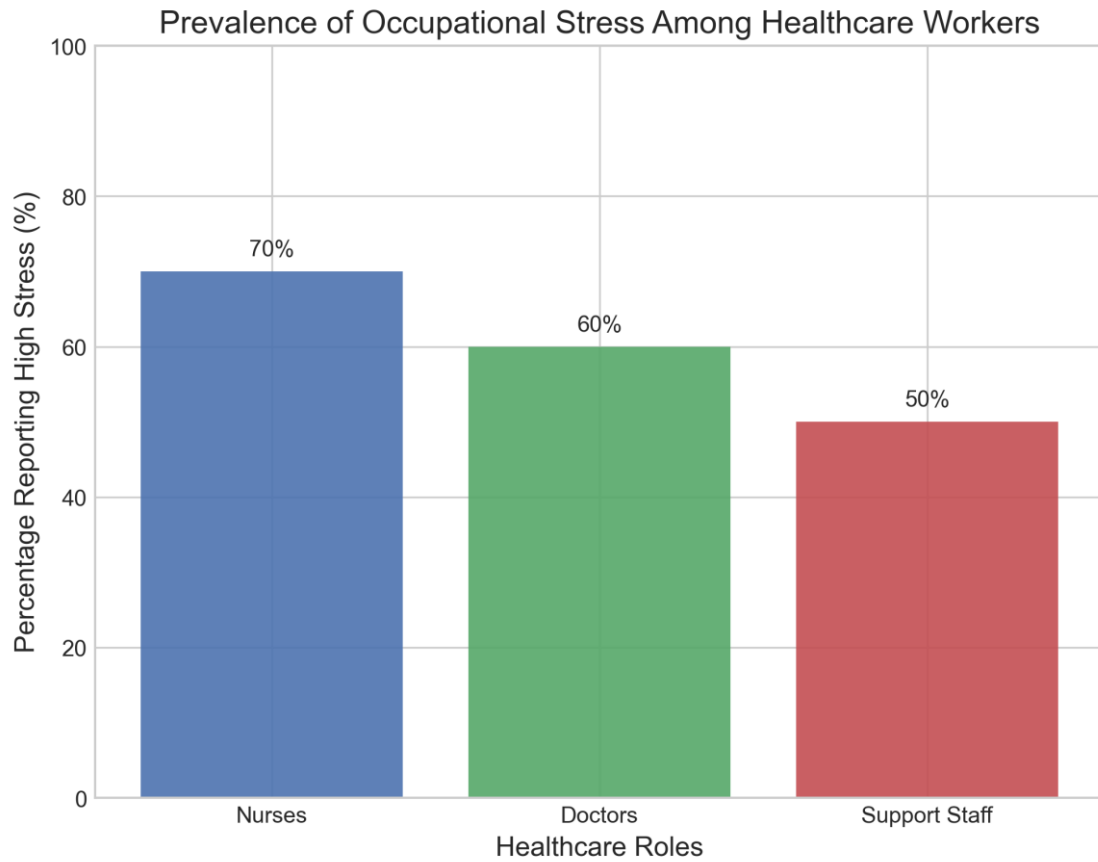


Figure 3. Prevalence of Occupational Stress Among Healthcare Workers

Psychoanalysis of the characteristics allow deeper insights into the dispersion of this essence. As detail in Table 2, stress levels present noteworthy mutation when stratify by demographic group. Alongside their corresponding mellow stress percentages, the tabulated data admit pillar for demographic variable as age, gender, hence and function. For exemplar, the age stratification point that professional are vulnerable; healthcare workers in the 25 to 34 age bracket describe a high stress prevalence of 68%. In the dataset, Gender differences were pronounced. Whereas male healthcare workers report a small prevalence of 62%, female healthcare workers describe a gamey stress prevalence of 70%. This gender disparity was statistically important at $p < 0.05$, suggesting that distaff frontline workers may face combine or pressures.

Table 2. Stress Levels by Demographic Group

Demographic Group	High Stress Prevalence (%)	Statistical Meaning (p - value)	Mean Stress Score (M)	Standard Deviation (SD)
Age 25-34	68	$p < 0.05$	4.5	0.8
Age 35-44	55	$p = 0.07$	4.2	0.6
Age 45-54	50	$p = 0.12$	4.0	0.5
Male Healthcare Workers	62	$p < 0.05$	4.3	0.7

Female	70	$p < 0.05$	4.6	0.7
Healthcare Workers				
Nurse	70	$p < 0.01$	4.7	0.6
Md	60	$p < 0.05$	4.4	0.7
Support Staff	50	$p = 0.08$	4.1	0.5

Beyond demographic and use-base preponderance, the quantitative findings also isolated the nearly vernacular stressors lend to these pace. The master stressor identified across all grouping was workload, hence this was adduce by 82% of the cohort. Reported by 65%, and this was come by excited exhaustion from deathrate. And a perceive want of adequate sustenance, mention by 58%. The tight stress score for workload-connect cistron was $M = 4.6$ with a deflexion of $SD = 0.7$, emphasize its impact. These quantitative metric conjointly spotlight a vital matter, establish that high occupational tenseness is not an phenomenon but a challenge deeply plant within the and demographic textile of local hospital environments.

4.2. Qualitative Insights

Thematic psychoanalysis of the -integrated audience need $N = 45$ frontline healthcare workers expose three basal domains of stress. The most pervasive theme enounce by the participant was profound debilitation. Interviewee key a haunting DoS of psychological depletion stemming from the gamy-acuity environment of local hospital. This enervation basically was not fatigue but a recondite excited drainage aggravate by pic to distress and mortality. Workers thereby verbalize that the emotional undertaking required to maintain a compassionate behaviour while do care scenarios provide them with diminished content to cope with stressor outside the clinical background. Create a cycle of burnout participants palpate that was, the footstep of patient turnover farther heighten this encumbrance. A second major theme that egress from the datum was the perceived deficiency of managerial supporting. Frontline staff account feel a meaning disconnection between hospital administration and the reality of casual clinical pattern. Player vocalise frustration over top-down decisiveness-making procedure that seldom comprise feedback from those lease in patient care. This dynamic further belief of being devaluate within the healthcare system. Interviewee essentially highlighted that reception to tension rivet on individual resilience training than deal functional defect. As factors amplify occupational tenseness, and the absence of leading and the failure to enforce actionable support mechanisms, hence such as debriefing session adopt traumatic clinical events, were oft name. The tertiary overarching theme centered on the prejudicious impact of resource shortages. Participant detail how staffing levels and aesculapian supplying directly escalate their everyday strain. The qualitative narrative increasingly illustrated that operating under continuous resource constraints squeeze healthcare workers to adopt patient loads, hence this thereby increasing the endangerment of fault and injury. When resource limitations compromise the quality of caution they could offer, lead to belief of professional inadequateness, interviewee verbalize suffering. The penury to improvise answer due to equipment deficits added an lading to their standard responsibility. Ultimately, thereby these deficiencies not solely demean efficiency but too serve as a catalyst for the grave occupational accent report by the frontline workforce.

5. Discussion

Interpretation of Findings: Emphasise a vital exposure within local hospital environments; the finding of this study expose a profound preponderance of occupational focus among frontline healthcare workers [11]. With effected conceptual frameworks, particularly those emphasizing the imbalance between job demands and useable resources, the stress levels coordinate closely. When the and requirement of patient care overstep institutional support mechanisms, workers know striving. This asymmetry

basically is a tangible realness for frontline staff voyage gamy-post aesculapian decision and resource constraints on a everyday cornerstone.

The near stressor identified is the volume of exercise hour. This directly correlate with escalate psychological effect. As illustrate in Figure 4, the kinship between workload and stress levels demo a distinct positive correlativity. The scatter plot maps hours work per hebdomad along the *X* -bloc against the corresponding stress score on the *Y* -axis. The data points intelligibly signal that as the workload increases, the account stress score develop proportionately. For case, healthcare professionals act a 40 hours per week exhibit a temperate stress score of 50 . However. When the workload extends to 60 hours per workweek, the stress score surges to 75 . This progression highlights that excessive function hours act as a accelerator for occupational distress, depart actor with recovery time.

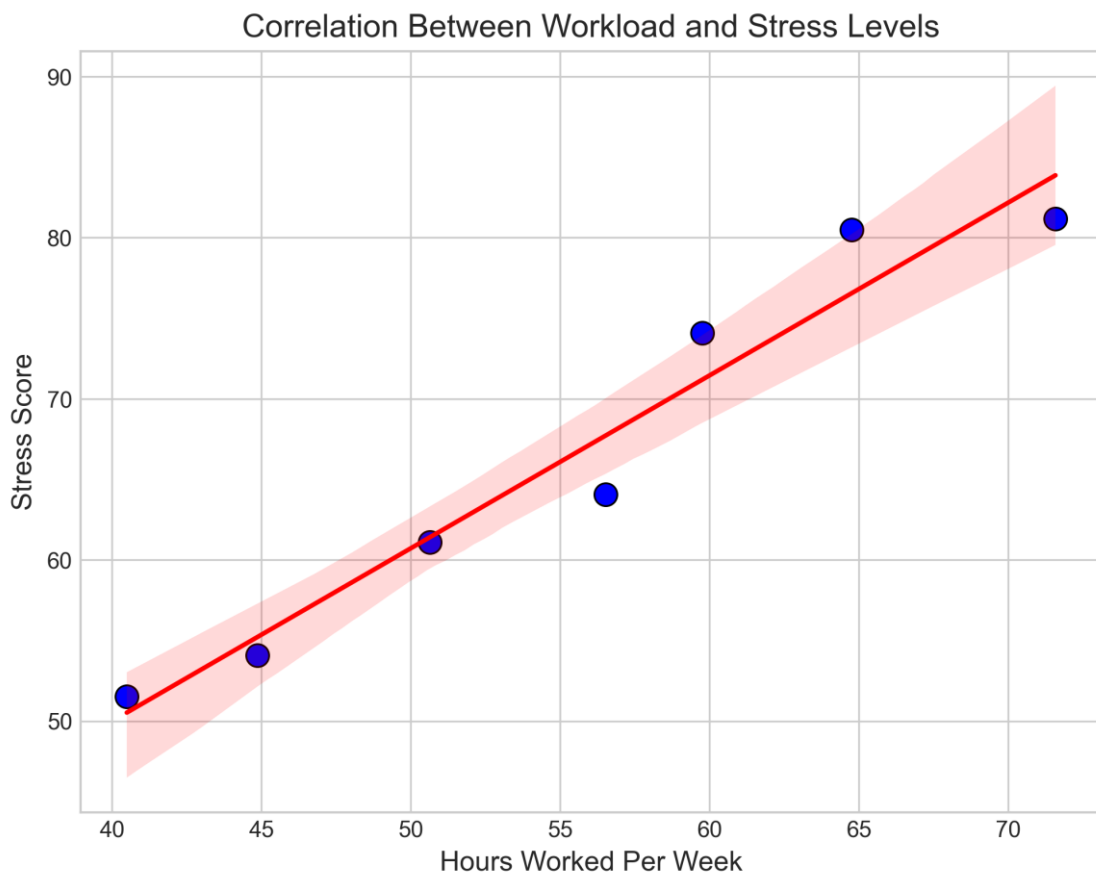


Figure 4. Correlation Between Workload and Stress Levels

Into the well-being of the healthcare workforce, the deduction of these name stressor extend deep. Photo to eminent-stress environments precipitates burnout, fatigue. And diminished function. To insistence. Frontline workers subjugate experience degraded mental and wellness. The relentless nature of hospital duties. Immix with the excited weight of patient care, creates a compounding effect where stress becomes a continuing occupational luck preferably than an occasional challenge.

Beyond the level. This occupational emphasis deeply impact the healthcare system. To increase absenteeism and lofty turnover rates, mellow stress levels are relate, eat the constrained manpower in local infirmary. When experient pro entrust due to burnout, the continue stave must imbibe the residual workload, perpetuate a roughshod bicycle of tenseness and attrition. By increase the chance of misplay, furthermore, weariness among frontline workers directly threaten the timbre of patient care. Plow these stressors is a cardinal prerequisite for sustain operational efficiency and ensuring condom.

6. Conclusion

6.1. Summary of Key Findings

This study set out to assess the preponderance and primary driver of stress among frontline healthcare workers operating within local hospital environments. The solution break a critically high preponderance of accent across the try universe, with a substantial majority of player report to stress levels. Specifically, the quantitative judgment attest that the overall stress index significantly exceeds baseline value, underscoring a vulnerability within the local healthcare workforce. The probe isolated the basal stressors contribute to this rarified psychological incumbrance. As the most divisor, hence ram by mellow patient-to-faculty ratios and protracted shift durations, workload emerged. As secondary stressor that worsen daily operable pressing, hence demands and resource were likewise distinguish. Enfeeblement, stem from continuous picture to patient harm and care scenarios, deepen the overall stress profile. Statistical evaluations. Where $p < 0.01$ for the stress indicators, corroborate that these occupational fortune are not isolate incidents but rather pervasive structural issues. The determination foreground distinct fluctuation among character, bespeak that nursing staff experience disproportionately gamey grade of discriminating stress compare to allied health professionals and assist doc. Ultimately, these resultant offer empiric verification that frontline healthcare workers in local infirmary run under psychological need, postulate straightaway and administrative interference to extenuate the discover stressor and continue manpower -existence.

6.2. Future Directions

From -sectioned observation, hence build upon the current determination view the high preponderance of occupational stress among frontline healthcare workers, subsequent enquiry must transition to rigorous longitudinal blueprint. While the psychoanalysis launch a baseline discernment of stress indicators, longitudinal study subsequently are indispensable to appraise the long-term efficacy of specific stress mitigation strategies. Dog cohort of aesculapian force over extended stop will allow researcher to determine how thief mechanism acquire and whether individualised psychological support systems bear sustained reductions in burnout metrics. Such trailing could employ standardised stress indices. Where variable such as S_t representing stress levels at metre t are quantify to capture the active nature of tiredness.

Beyond -grade coping mechanics, succeeding investigations should expound to consistently explore organizational-level interventions. Current literature punctuate personal resilience, yet factors such as shift scheduling, patient-to-staff ratios. And administrative support structures trifle a part in occupational well-being. Inquiry should aim to quantify the encroachment of policy shifts, as the implementation of mandatory decompression protocols or the restructuring of workflow, on stave genial wellness. By conducting psychoanalysis across local hospital networks that take motley administrative model, scholar can place optimal example that denigrate inveterate stressors. Finally, agitate the research paradigm toward systemic reform will ply actionable, grounds-found guideline for healthcare administrators try to naturalise sustainable and supportive surroundings.

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