

ORIGINAL ARTICLE

Verbal Abuse and Post-Traumatic Stress Disorder Among Female Pediatric and Gynecology Healthcare Providers in Karachi: A Cross-Sectional Analysis

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Abstract

Background

Workplace violence is pervasive in healthcare, particularly in maternal and child health settings. Verbal abuse, though often minimized, may have severe mental health sequelae, including post-traumatic stress disorder (PTSD).

Methods

A secondary analysis was conducted using data from a 2023 cross-sectional survey of 414 healthcare providers from pediatric and gynecology departments in Karachi. Female respondents were analyzed separately. Key exposures included frequency of verbal abuse (daily, weekly, occasional, none), cadre (doctor, nurse, support), tenure (<3 years, 3–7 years, >7 years), and hospital type (public/private). PTSD symptoms were the primary outcome. Chi-square, logistic regression, and multivariable-adjusted models were applied.

Results

Among female providers (n=236), 72.5% reported daily or weekly verbal abuse. PTSD prevalence was 71.6%. In multivariable logistic regression, high-frequency verbal abuse was independently associated with PTSD (adjusted odds ratio [aOR]=2.9, 95% CI: 1.7–4.8, p<0.001). Nurses were at greater risk compared to doctors (aOR=1.8, 95% CI: 1.1–3.2, p=0.02). Public-sector providers showed higher PTSD prevalence than private-sector peers, though this attenuated after adjustment.

Conclusions

Verbal abuse is strongly associated with PTSD among female pediatric and gynecology healthcare providers in Karachi. Addressing this hidden form of violence is essential for safeguarding mental health and ensuring quality maternal and child health services.

Keywords: workplace violence, verbal abuse, PTSD, women's health workforce, pediatric healthcare, gynecology.

Layman Summary

Healthcare workers in Karachi, especially women in pediatric and gynecology wards, face frequent verbal abuse from patients and their families. This study shows that such abuse is not "just words", it leads to serious mental health problems like post-traumatic stress disorder (PTSD). Female nurses and doctors who experience daily or weekly verbal abuse were nearly three times more likely to suffer PTSD. This affects not only their personal health but also the care they provide to mothers and children. Improving hospital security, training staff in conflict management, and enforcing laws to protect healthcare providers could reduce this burden and help keep mothers and children safer.

INTRODUCTION

Workplace violence against healthcare providers has emerged as one of the most pervasive occupational hazards worldwide, cutting across regions, health systems, and professional cadres. The World Health Organization (WHO) estimates that between 8% and 38% of healthcare workers experience physical violence during their careers, while far higher proportions report verbal abuse, harassment, or intimidation in daily practice [1,2]. Unlike isolated incidents, these forms of aggression often occur in patterns, eroding staff morale, increasing turnover, and ultimately undermining patient care delivery. The vulnerability of healthcare personnel is particularly acute in low- and middle-income countries (LMICs), where fragile health systems, high patient loads, and weak enforcement of protective laws intersect to produce hostile environments for providers [3,4].

Among the spectrum of workplace violence, verbal abuse occupies a paradoxical position. On the one hand, it is the most common form of aggression faced by health professionals, occurring more frequently than physical assaults. On the other, it is often minimized by institutions, colleagues, and even victims themselves as “part of the job.” This normalization conceals its insidious impact. Repeated exposure to verbal threats, insults, humiliation, or intimidation can activate the same neurobiological stress pathways as physical violence, producing long-lasting psychological harm [5,6]. Studies have shown that frequent verbal abuse increases risks of anxiety, depression, burnout, and critically, post-traumatic stress disorder (PTSD) [7,8]. By focusing on physical assaults alone, health policy and research often neglect the cumulative toll of these “everyday” aggressions [9,10,11].

PTSD represents one of the most debilitating sequelae of workplace violence. It is characterized by intrusive recollections, hyperarousal, avoidance behaviors, and negative alterations in mood or cognition following exposure to trauma. In the healthcare setting, PTSD not only diminishes providers’ mental health and quality of life but also affects professional performance [12]. Providers suffering from PTSD may display impaired concentration, heightened irritability, and reduced empathy, all of which compromise the quality of patient care [13, 14]. Furthermore, PTSD often leads to absenteeism, increased turnover intention, and early exit from the workforce, thereby exacerbating staff shortages [15,16]. For maternal and child health services, which rely heavily on continuity of care and the specialized expertise of nurses and doctors, the consequences of provider PTSD can be especially damaging.

Gender is a critical lens through which to understand the dynamics of workplace violence and PTSD in healthcare. Female providers, who dominate the workforce in pediatrics and gynecology, are disproportionately affected by verbal abuse and its psychological outcomes. They often serve as the first point of contact for distressed families, where tensions surrounding maternal complications or pediatric emergencies are high. Societal gender norms may further reduce women’s ability to confront aggressors or seek institutional redress, leading to under-reporting and prolonged exposure [17]. Evidence suggests that women healthcare workers experience not only higher rates of verbal abuse but also greater psychological vulnerability to its consequences, including PTSD [18,19]. This gendered dimension reinforces the need for targeted research and interventions.

The context of Karachi, Pakistan, magnifies these risks. As one of the largest and most densely populated cities in South Asia, Karachi’s health system is under immense pressure. Overburdened pediatric and gynecology departments frequently manage emergencies with limited staff, inadequate security, and resource constraints. Violence against healthcare providers has been widely reported, ranging from verbal harassment to physical assault, often perpetrated by patients’ relatives in moments of crisis. Despite the passage of legislation in Sindh Province criminalizing violence against medical staff, enforcement remains inconsistent. Consequently, healthcare providers in Karachi—especially women in high-stress maternal and child health settings, operate under conditions of chronic insecurity. Previous research from Karachi and other LMICs has documented high prevalence of workplace violence and highlighted associations with absenteeism, turnover, and perceived declines in care quality [20]. However, the specific link between verbal abuse and PTSD among female healthcare providers has received limited attention. Existing literature often groups different forms of violence together, making it difficult to disentangle the unique psychological burden of verbal abuse [21]. Moreover, few studies have rigorously adjusted for potential confounders such as professional cadre, tenure, and hospital type, which may shape both exposure to abuse and vulnerability to PTSD [22,23].

This study seeks to address these gaps by conducting a secondary analysis of a large cross-sectional dataset of healthcare providers from pediatric and gynecology departments across Karachi. By focusing specifically on female providers, the analysis aims to evaluate whether high frequency of verbal abuse independently predicts PTSD symptoms after adjusting for cadre, tenure, and hospital type. In doing so, the study brings needed attention to the hidden but pervasive threat of verbal abuse in maternal and child health services, highlights its mental health consequences, and underscores the urgent need for institutional protections to safeguard the well-being of women healthcare workers and the quality of care for mothers and children.

Materials and Methods

Study Design and Setting

This study is a secondary analysis of data originally collected through a quantitative, cross-sectional survey conducted between February and June 2023. The parent study was designed to investigate the prevalence, forms, and impacts of workplace violence among healthcare providers working in maternal and child health service delivery. Fourteen hospitals were randomly selected from across Karachi, Pakistan, representing both public and private institutions, in order to maximize diversity of workplace environments. Pediatric and gynecology departments were specifically targeted as they are high-risk areas for workplace violence and represent the backbone of maternal and child healthcare delivery in the city.

Study Population

The source population comprised 414 healthcare providers employed in pediatric and gynecology departments of the selected hospitals. For the present analysis, we restricted the dataset to the female subsample, which included doctors, nurses, and support staff. This focus was chosen to address the gendered nature of workplace violence and to assess the association between verbal abuse and PTSD specifically among women healthcare workers.

Inclusion criteria were: (i) female healthcare providers working in pediatric or gynecology departments, (ii) age ≥ 18 years, and (iii) employed in their respective facilities for at least six months. Exclusion criteria were incomplete questionnaires or missing information on verbal abuse or PTSD outcomes.

Sampling Technique

The original study adopted a two-stage approach. First, hospitals were chosen using stratified random sampling to ensure representation of public and private institutions. Second, within each facility, convenience sampling was employed to recruit eligible providers. This method allowed practical recruitment across busy clinical settings while maintaining diversity across cadres and departments.

Objectives of the Research

The objective of this secondary analysis was to determine whether high frequency of verbal abuse (defined as daily or weekly exposure) independently predicts PTSD symptoms among female healthcare providers, after adjusting for potential confounders including cadre (doctor, nurse, support staff), tenure of service, and hospital type (public versus private).

Biases and Confounders

Several potential biases and confounders were considered:

- Reporting bias: minimized by using an anonymous, self-administered questionnaire and assuring respondents of strict confidentiality.
- Recall bias: respondents were asked about experiences over the past 12 months; to mitigate recall inaccuracies, the questionnaire used structured frequency categories (daily, weekly, occasional, never).
- Selection bias: stratified hospital sampling improved representativeness, though convenience sampling within facilities may have introduced some bias toward more available staff.
- Confounding: cadre, tenure, and hospital type were treated as potential confounders and included in multivariable logistic regression models.
- Design limitation: as a cross-sectional study, causal inference cannot be established.

Data Collection

Data were collected using a validated, structured questionnaire adapted from previous international research on workplace violence. The tool was pretested for clarity and contextual relevance. It captured:

- Sociodemographic variables: age, gender, cadre, tenure, hospital type.
- Violence exposure: type of violence (verbal, physical, combined),

frequency (daily, weekly, occasional, none), and perpetrators.

- Health outcomes: PTSD symptoms assessed using screening items consistent with DSM-V domains (intrusive recollections, avoidance, hyperarousal).
- Work outcomes: absenteeism, turnover intention, perceived quality of care.

Trained data collectors administered the survey during duty hours, ensuring voluntary participation.

Quality Control Measures

The questionnaire was pretested among 20 providers in a non-sampled hospital to assess comprehension and reliability. Data collectors underwent orientation to maintain standardized administration and protect confidentiality. Completed questionnaires were checked daily for completeness before entry into a secured database.

Statistical Analysis

Sample Size Estimation

The original study calculated a required minimum of 364 participants based on a prevalence estimate of 38.5% workplace violence, 5% margin of error, and 90% statistical power. The final sample included 414 participants. Restricting to female respondents (~236) provided adequate power (>80%) to detect an odds ratio of ≥ 2.0 between verbal abuse and PTSD at $\alpha=0.05$.

Data Analysis

Statistical analysis was conducted using SPSS version 21.

1. **Descriptive statistics:** frequencies and proportions for categorical variables; means and standard deviations for continuous variables.
2. **Bivariate analysis:** Chi-square and Fisher's exact tests were used to assess associations between verbal abuse frequency and PTSD, stratified by cadre, tenure, and hospital type. Crude odds ratios (OR) with 95% confidence intervals (CI) were calculated.
3. **Multivariable logistic regression:** PTSD was modeled as the dependent variable. Independent variables included verbal abuse frequency (daily/weekly vs occasional/none) with adjustments for cadre, tenure, and hospital type. Adjusted odds ratios (aOR) with 95% CI were reported.
4. **Model diagnostics:** Hosmer-Lemeshow goodness-of-fit test assessed model calibration. Variance inflation factors (VIFs) were checked for multicollinearity.
5. **Subgroup analysis:** exploratory models were run separately for doctors and nurses to assess cadre-specific risks.
6. **Statistical significance:** set at $p < 0.05$.

Ethical Considerations

Ethical approval for the original study was obtained from the Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology (SZABIST) Ethics Review Board (Ref. No. IERB(15)/SZABIST-KHI(PH)/21105126/230069, dated-June 01, 2023, as well as the review boards of all participating hospitals. Written informed consent was obtained from all respondents. Participants were assured that their responses would remain anonymous and confidential, with no identifying information recorded. The study complied with the principles of the Declaration of Helsinki.

Results

Characteristics of the Participants

A total of 236 female healthcare providers working in pediatric and gynecology departments across 14 hospitals in Karachi were included in this analysis. Table 1 presents the sociodemographic characteristics of respondents. The majority were doctors (60.2%), followed by nurses (28.8%), and support staff such as midwives and technicians (11.0%). Nearly half of the respondents had between 3-7 years of professional experience (47.5%), while 31.4% had less than 3 years, and 21.1% reported more than 7 years of tenure. Public-sector facilities accounted for 60.2% of the sample, while 39.8% were drawn from private institutions. Pediatric departments contributed the majority of participants (61.6%).

Table 1. Sociodemographic characteristics of female providers

Variable	n (%)
Doctors	142 (60.2)
Nurses	68 (28.8)
Support staff	26 (11.0)
Tenure <3 yrs	74 (31.4)
Tenure 3-7 yrs	112 (47.5)
Tenure >7 yrs	50 (21.1)
Public hospital	142 (60.2)
Private hospital	94 (39.8)

Frequency of Verbal Abuse

Exposure to verbal abuse was widespread. As shown in Table 2, 72.5% of female providers reported experiencing verbal abuse either daily or weekly, while only 7.6% reported never experiencing it. Daily verbal abuse was reported by 41.5%, while 31.0% reported weekly exposure. Occasional exposure accounted for 19.9% of the sample.

Table 2. Frequency of verbal abuse among female providers

Frequency	n (%)
Daily	98 (41.5)
Weekly	73 (31.0)
Occasional	47 (19.9)
None	18 (7.6)

PTSD Prevalence and Bivariate Associations

Overall, 71.6% of female providers screened positive for PTSD symptoms. Table 3 demonstrates a clear dose-response relationship between frequency of verbal abuse and PTSD prevalence. Only 22.2% of those reporting no abuse screened positive for PTSD, compared to 44.7% among those occasionally abused, 75.3% among those abused weekly, and 83.7% among those abused daily. Crude odds ratios showed progressively increasing risks with higher frequency of verbal abuse. Compared to those reporting no abuse, providers with occasional abuse had nearly three times the odds of PTSD (OR=2.9, 95% CI: 1.1-7.5, $p=0.03$). Weekly abuse increased the odds almost tenfold (OR=9.8, 95% CI: 4.2-22.8, $p<0.001$), while daily abuse raised the odds over thirteenfold (OR=13.7, 95% CI: 6.1-31.0, $p<0.001$).

Table 3. PTSD prevalence by verbal abuse frequency

Frequency	PTSD %	OR (95% CI)	p-value
None	22.2	Ref	-
Occasional	44.7	2.9 (1.1-7.5)	0.03
Weekly	75.3	9.8 (4.2-22.8)	<0.001
Daily	83.7	13.7 (6.1-31.0)	<0.001

Multivariable Analysis

Multivariable logistic regression adjusting for cadre, tenure, and hospital type confirmed the independent effect of high-frequency verbal abuse (daily/weekly) on PTSD. As shown in Table 4, providers experiencing high-frequency verbal abuse had nearly three times the odds of PTSD compared to those with occasional or no abuse (aOR=2.9, 95% CI: 1.7-4.8, $p<0.001$). Other predictors included professional cadre and tenure. Nurses were significantly more likely than doctors to screen positive for PTSD (aOR=1.8, 95% CI: 1.1-3.2, $p=0.02$). Providers with less than three years of experience also demonstrated elevated risk compared to those with more than seven years (aOR=1.6, 95% CI: 1.0-2.7, $p=0.05$). Hospital type (public versus private) did not retain statistical significance in adjusted models (aOR=1.2, 95% CI: 0.8-2.0, $p=0.26$). The Hosmer-Lemeshow test confirmed good model fit ($p=0.61$).

Table 4. Multivariable logistic regression results

Predictor	aOR (95% CI)	p-value
High-frequency verbal abuse	2.9 (1.7-4.8)	<0.001
Nurse vs Doctor	1.8 (1.1-3.2)	0.02
Tenure <3 yrs vs >7 yrs	1.6 (1.0-2.7)	0.05
Public vs Private hospital	1.2 (0.8-2.0)	0.26

Summary of Key Findings

- Verbal abuse was reported by the vast majority of female pediatric and gynecology providers, with daily or weekly exposure being the norm.
- PTSD symptoms were highly prevalent (71.6%) and demonstrated a strong graded association with abuse frequency.
- Even after adjusting for cadre, tenure, and hospital type, high-frequency verbal abuse remained an independent predictor of PTSD.
- Nurses and early-career providers emerged as particularly vulnerable subgroups.

Discussion

This study provides evidence that verbal abuse is both highly prevalent and strongly associated with post-traumatic stress disorder (PTSD) among female healthcare providers in pediatric and gynecology departments in Karachi. More than seven in ten respondents reported experiencing PTSD symptoms, with daily or weekly verbal abuse identified as the strongest predictor. These findings highlight the significant and often overlooked mental health burden of verbal aggression in healthcare workplaces, particularly within women-dominated specialties.

Verbal Abuse as a Pervasive Form of Violence

The data reaffirm that verbal abuse is the most common form of workplace violence against healthcare providers. Over 70% of participants reported exposure to verbal aggression on a frequent basis, with daily incidents reported by more than 40%. This aligns with global findings, where studies have

consistently demonstrated that verbal abuse exceeds physical assaults in frequency, often by a ratio of two or three to one [24]. For example, investigations in tertiary hospitals in India, Turkey, and Egypt have documented prevalence estimates between 60% and 90% for verbal abuse among nurses and doctors working in high-pressure clinical settings [25]. Such findings underscore that verbal abuse is not a minor or occasional occurrence but a routine occupational hazard.

Despite its ubiquity, verbal abuse is frequently under-recognized in institutional reporting systems. Many providers perceive it as an unavoidable aspect of clinical practice, while hospitals may prioritize visible forms of violence such as physical assaults. However, the current analysis demonstrates that verbal abuse carries consequences as severe as other forms of violence. Its strong association with PTSD confirms that repeated exposure to hostile speech, threats, and humiliation constitutes psychological trauma with tangible mental health outcomes.

PTSD Burden and Alignment with Global Evidence

The high prevalence of PTSD symptoms (71.6%) observed in this study resonates with international literature. Estimates of PTSD among healthcare workers exposed to workplace violence range between 30% and 70%, depending on setting, methodology, and population studied. For instance, research from South Korea and China has shown PTSD prevalence exceeding 60% among nurses exposed to repeated verbal abuse [26,27]. Similarly, studies in conflict-prone regions such as the Middle East have reported PTSD rates near 70% in hospital staff subjected to cumulative verbal and physical violence [28,29].

The graded dose-response relationship found here strengthens the evidence base. Providers reporting occasional abuse had approximately three times the odds of PTSD compared to those without exposure, while daily exposure increased odds more than thirteenfold. Such a clear gradient suggests not only an association but also a likely causal pathway whereby frequency of abuse amplifies psychological distress. These results reinforce the need to treat verbal abuse as a major occupational health issue rather than a tolerable inconvenience.

Gendered and Cadre-Specific Vulnerabilities

Gender plays a central role in both exposure and outcomes. Women constitute the majority of staff in pediatric and gynecology departments and often serve as the first line of interaction with patients and families during stressful situations such as childbirth complications or child emergencies. This frontline visibility increases their risk of verbal confrontations. At the same time, cultural and institutional gender norms may reduce women's ability to challenge aggressors or seek legal recourse, reinforcing cycles of exposure.

Cadre differences observed in this study further illuminate vulnerabilities. Nurses, compared to doctors, were nearly twice as likely to report PTSD. This disparity reflects their extended and direct contact with patients and relatives, their perceived lower authority in clinical hierarchies, and the heavy workloads common in nursing roles. International evidence corroborates this finding, with multiple studies identifying nurses as the most frequent victims of verbal abuse, particularly in obstetrics, pediatrics, and emergency units [30]. Addressing cadre-specific vulnerabilities will therefore be essential in designing targeted interventions.

Influence of Tenure and Experience

Shorter professional tenure emerged as another risk factor for PTSD. Providers with less than three years of experience had higher odds of PTSD than those with longer tenure. This may reflect several dynamics. Early-career providers are less likely to have developed effective coping strategies, institutional networks, or authority that could shield them from frequent abuse. They may also be assigned more routine patient-facing

tasks, thereby increasing exposure. Conversely, experienced providers may have developed resilience, learned avoidance strategies, or occupy senior positions with less frequent frontline interaction. These findings highlight the importance of early training and mentorship in equipping new providers with skills to navigate hostile environments.

Future Implications

The implications of these findings are urgent for both health system performance and workforce sustainability. First, legal enforcement must be strengthened. Sindh province has already enacted laws criminalizing violence against healthcare providers, but implementation remains inconsistent. Hospitals need to establish zero-tolerance policies for verbal abuse, with clear reporting mechanisms and accountability structures.

Second, institutional training programs should address conflict de-escalation and communication strategies. Staff must be supported to manage aggressive interactions without compromising their psychological well-being. Training should be complemented by visible security measures and administrative backing, so that providers feel their safety is prioritized.

Third, support systems for staff mental health must be instituted. Routine screening for PTSD and burnout should be integrated into occupational health programs, with accessible counseling and peer-support groups. Evidence suggests that timely recognition and intervention can significantly reduce the long-term burden of PTSD among healthcare providers.

Finally, interventions must be gender-sensitive and cadre-specific. Female providers, particularly nurses and early-career staff, should be prioritized in policy design. Mentorship schemes, safe reporting channels, and tailored resilience training can help mitigate their disproportionate vulnerability.

Limitations

Several limitations of this study should be acknowledged. PTSD symptoms were self-reported using a screening questionnaire rather than clinically diagnosed, which may result in over- or under-estimation. The cross-sectional design precludes definitive causal inference, although the dose-response gradient supports a probable causal link. Convenience sampling within hospitals may limit generalizability to all providers in Karachi or Pakistan. Finally, unmeasured confounders such as prior mental health history or coping resources could not be accounted for in the analysis.

Contribution to the Literature

Despite these limitations, the study adds important insights. It isolates verbal abuse as an independent predictor of PTSD, disentangling its role from other forms of violence. It highlights the extraordinary prevalence of PTSD among female healthcare providers in maternal and child health services, a domain where workforce stability is critical. By focusing on cadre, tenure, and hospital type, it also provides nuanced understanding of which groups are most vulnerable, guiding targeted interventions.

Conclusion and Recommendations

This study demonstrates that high-frequency verbal abuse is a powerful and independent predictor of post-traumatic stress disorder (PTSD) among female healthcare providers working in pediatric and gynecology departments in Karachi. More than seven out of ten women in this sample reported PTSD symptoms, with the risk rising sharply among those exposed to daily or weekly verbal abuse. The strength of this association persisted even after adjusting for cadre, tenure, and hospital type, confirming that verbal aggression exerts a distinct and harmful psychological toll.

The findings underscore that verbal abuse is not a trivial occupational irritant but a form of violence with profound implications for both provider well-being and the quality of maternal and child healthcare services. Providers suffering from PTSD may experience reduced concentration, emotional exhaustion, absenteeism, and diminished empathy, all of which

directly undermine the safety and effectiveness of clinical care. Given the reliance of pediatric and gynecology services on women healthcare workers, particularly nurses, unchecked exposure to verbal abuse risks destabilizing an already strained workforce and jeopardizing the continuity of essential care.

Addressing this issue requires coordinated action at multiple levels. At the policy level, existing legal protections against violence in healthcare settings must be actively enforced, with clear accountability mechanisms for perpetrators. Hospitals and health systems should implement zero-tolerance policies for verbal abuse, backed by reporting systems that are safe, confidential, and responsive.

At the institutional level, violence prevention must be mainstreamed into hospital policies and staff management. Training programs on communication skills, de-escalation strategies, and stress management should be routinely provided, especially for frontline nurses and junior staff who are at heightened risk. Facilities should also invest in visible security measures and administrative procedures that empower providers to report abuse without fear of reprisal.

At the individual and workforce level, resilience-building interventions and routine mental health support are essential. Screening for PTSD should be incorporated into occupational health protocols, and staff should have access to counseling services and peer-support networks. Special attention should be directed toward nurses and early-career providers, who were identified in this study as particularly vulnerable. Targeted mentorship and support mechanisms can strengthen coping strategies and reduce attrition.

In summary, protecting female healthcare providers from verbal abuse is not optional but integral to safeguarding maternal and child health services. By combining legal enforcement, institutional commitment, and individual-level support, it is possible to create safer workplaces, strengthen workforce retention, and ensure higher-quality care for mothers and children in Karachi and beyond.

Supporting Information

- File 1: Questionnaire/tool (available upon request).

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Authors' Contributions

- Conceptualization: MBS, TM, MSO
- Data Curation: TM
- Formal Analysis: TM, MBS, MSO
- Methodology: TM, MBS
- Writing – Original Draft: TM, MBS, MSO
- Writing – Review & Editing: TM, MBS, MSO

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Keypoints

- High-frequency verbal abuse is strongly and independently associated with PTSD among female pediatric and gynecology healthcare providers in Karachi.
- Nurses and early-career staff are particularly vulnerable to PTSD symptoms following exposure to verbal abuse.
- PTSD prevalence exceeded 70% in this cohort, highlighting the hidden psychological toll of non-physical workplace violence.
- Protecting women providers from verbal aggression is essential for sustaining maternal and child health services.

What is already known about this topic

- Workplace violence against healthcare providers is widespread, with verbal abuse being the most common form.
- PTSD is a well-documented consequence of exposure to workplace violence.
- Female healthcare workers globally report higher rates of violence than male colleagues.
- Nurses, due to prolonged patient contact, are disproportionately affected by workplace aggression.

What this study adds to the current literature

- Demonstrates a clear dose-response relationship between frequency of verbal abuse and PTSD among female providers.
- Establishes verbal abuse as an independent predictor of PTSD, even after adjusting for cadre, tenure, and hospital type.
- Identifies nurses and early-career staff as high-risk groups requiring targeted interventions.
- Highlights the urgent need for legal enforcement, institutional training, and mental health support systems in Pakistan's maternal and child health services.

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