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# Beyond staffing shortages: Supervisory and interpersonal factors driving occupational stress among nurses in tertiary hospitals in Delta State

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## Abstract

***Background:*** *Occupational stress among nurses is commonly linked to staffing shortages and excessive workloads. However, emerging evidence suggests that workplace relationships, particularly with supervisors, physicians, patients, and families, may exert an equally significant, if not greater, influence on nurses' well-being.*

*Aim: This study investigated whether supervisory and interpersonal stressors outweigh workload-related factors as drivers of occupational stress among nurses in tertiary hospitals and identified demographic factors associated with stress within the Demand–Control–Support framework.*

***Methods:*** *A descriptive cross-sectional survey was conducted among registered nurses in two tertiary hospitals in Delta State, Nigeria. From a population of 714 nurses, 259 with at least two years of clinical experience were selected using a stratified sampling technique. Occupational stress was assessed using the 50-item Expanded Nursing Stress Scale (ENSS), comprising eight stress domains rated on a four-point Likert scale. Domain rankings were based on mean scores, while differences across demographic groups were examined using Mann–Whitney U and Kruskal–Wallis tests at a significance level of $p < .05$.*

***Results:*** *Nearly two-thirds (65.4%) of participants reported moderate-to-severe stress. Problems with supervisors ($M = 3.30$) emerged as the highest stressor, followed by patient and family interactions ($M = 3.20$), both exceeding workload-related stress ($M = 3.17$). Age significantly influenced stress levels ($H = 16.684$, $p = .001$), with nurses aged 21–30 years reporting the highest stress. Years of experience also showed a significant effect ($H = 8.002$, $p = .020$), with less experienced nurses reporting greater stress. Gender and marital status were not significant predictors.*


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***Conclusion:*** *Supervisory and interpersonal stressors surpassed workload as the primary sources of occupational stress. Findings support the Demand–Control–Support model and highlight the need for interventions that strengthen supervisory support, improve workplace relationships, and support early-career nurses alongside staffing improvements.*

**Keywords:** *Occupational stress; Supervisory support; Interpersonal conflict; Demand–Control–Support model; Expanded Nursing Stress Scale*

## Introduction

Work-related stress is now recognised across occupational health as one of the defining hazards of modern working life, and few occupations illustrate this more sharply than nursing. Nurses make up the largest share of the hospital workforce and spend more sustained, intimate time with patients than almost any other group of clinicians, which places them at the intersection of clinical demand, emotional labour and organisational pressure (Kiptulon et al (2024). The consequences when that pressure is not absorbed are well documented: stress in nurses has been tied to absenteeism, turnover intention, diminished compassion, lapses in concentration and an elevated risk of clinical error, all of which feed back into the quality and safety of patient care (Zabin et al., 2023; Sani et al., 2024). In previous studies, the explanation for this burden has taken a familiar form. Too many patients, too few nurses, too many hours, staffing shortages and workload are routinely named as the first and most powerful sources of nursing stress, and several large studies have placed workload at the very top of the ranking (Danjin et al., 2016; Kassa et al., 2017; Mosadeghrad, 2013; Muazza, 2013). The intuition is reasonable, and the remedy that follows from it is straightforward: hire more nurses, and the stress will fall. However, those framing risks obscure a second story that runs through the same evidence base, one that is less about how much work there is and more about the human relationships through which the work is done.

That second story has been gathering weight. In a study of Indonesian nurses, the leading stressors were not raw workload, but role conflict, unclear roles, and the quality of relationships with supervisors and co-workers, and these relational stressors predicted job performance regardless of the nurses' background (Vallone, & Zurlo, 2024). Among Polish service workers, the assessment of the supervisory relationship and the degree of trust placed in supervisors emerged as primary predictors of stress severity, operating alongside workload rather than beneath it (Chudzicka-Czupala et al., 2022). Research on abusive supervision has shown that a poor relationship with one's manager corrodes the basic psychological needs that buffer people against strain (Wang et al., 2024). Analyses that placed interpersonal conflict and workload side by side found that together they accounted for the great majority of the variance in employee stress (Anggraeni et al., 2021). The same signal appears in recent nursing-specific work using the Expanded Nursing Stress Scale (ENSS): hospital nurses in Indonesia named problems with supervisors, workload and treatment uncertainty as their principal stressors (Saefurrohim & Wibawani, 2025), a quantitative review of nurses in the United States concluded that supervisor problems belonged among the primary stressors alongside workload and patient and family interactions (Zerman, 2025), and new graduate nurses in Saudi Arabia identified problems with supervisors and workload together (Estadilla et al., 2025). A qualitative study of German nursing staff and their supervisors similarly found that staff shortages and time pressure coexisted with interprofessional conflict and a perceived lack of appreciation, and that staff and managers disagreed about who was responsible for the resulting strain (Helaß et al., 2025).

Patients and their families form a second relational front. Caring for distressed, demanding, or grieving people is emotionally taxing in ways that a workload cannot capture, and studies that have examined this directly have found contact with patients and families among the strongest stressors nurses report (Apeksha & Mahadeo, 2014; Pavlos et al., 2016). Conflict with physicians adds a further interprofessional layer. What these strands have in common is that they locate the source of stress not in the volume of tasks but in the social organisation of the work in supervision, collaboration and the management of difficult human encounters.

The experience of this burden is not evenly distributed. A consistent demographic gradient runs through the literature: younger nurses and those earlier in their careers tend to report more stress than their older, more seasoned colleagues. Nurses with fewer than five to ten years of work experience were markedly more likely to be stressed in Ethiopian and Iranian samples (Hashemian et al., 2015; Kassa et al., 2017), age significantly moderated the impact of role conflict on stress among construction professionals (Dodanwala et al., 2021), and age and work experience were inversely associated with job stress among financial professionals, with those under five years' experience feeling deadline pressure most acutely (Kutebayev et al., 2024). Work examining stress across different professional groups has likewise found that older workers, with a longer-consolidated repertoire of coping strategies, tend to handle stress better (Bartkowiak et al., 2022). The plausible mechanism is developmental: experience appears to build tolerance and a store of strategies that newer staff have not yet acquired.

The theoretical lens helps to organise these observations. The Job Demands–Resources (JD–R) model proposes that employee strain arises when job demands, such as workload and emotional pressures, exceed the resources available to cope with them. Resources—including autonomy, organizational support, psychological safety, and supportive leadership—not only promote well-being and engagement but also buffer the adverse effects of high demands. Consequently, employees are most vulnerable to stress and burnout when demanding work conditions are coupled with insufficient resources and support (Bakker & Demerouti, 2024; Jing et al., 2024).

Within this Demand–Control–Support framework, the supervisory relationship and relationships with colleagues are not background noise; they are the support axis itself. A supervisor who is unsupportive, or a workplace marked by conflict, removes precisely the buffer the model predicts is protective, so that the same level of demand produces more strain. The framework, therefore, offers a principled reason to expect supervisory and interpersonal stressors to rival or exceed workload, and to expect


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the burden to fall hardest on the young and the inexperienced who have the least control and the thinnest support networks at work.

Despite this, much of the policy conversation around nursing stress in Nigeria and the wider sub-region still defaults to a staffing-and-workload explanation, and there is relatively little empirical work that focuses on the relational drivers of stress from the workload drivers in tertiary hospitals, where the acuity and referral burden are highest (Etim et al., 2015). The present study addresses that gap. Working within the Demand–Control–Support framework, it set out to: (1) rank the eight ENSS stressor domains by their contribution to overall occupational stress; (2) compare the influence of supervisory and interpersonal stressors (problems with supervisor, patient and family, and conflict with physicians) against staffing- and workload-related stressors; and (3) determine the influence of age and years of experience on overall occupational stress. Three hypotheses were examined: that supervisory and interpersonal stressors will not significantly contribute more strongly to overall stress than staffing/workload stressors (H1); that age will not significantly influence stress, with younger nurses more stressed (H2); and that years of experience will not significantly influence stress, with less-experienced nurses more stressed (H3).

# Methods

### Study design

A descriptive cross-sectional survey design was used. The design suited the study's aim, which was to describe and compare the relative contribution of different stressors domains as they occur naturally among practicing nurses, without manipulating the work environment. The same design has been used in comparable nursing-stress research in the region (Adzakpah et al., 2016).

### Setting

The study was carried out in the two tertiary hospitals serving Delta State, in the South-South geopolitical zone of Nigeria. The Federal Medical Centre, Asaba, is a federal facility in Oshimili South Local Government Area with a bed capacity of 297 across 26 units and approximately 450 nurses. The Delta State University Teaching Hospital (DELSUTH), Oghara, in Ethiope West Local Government Area, has a bed capacity of 174 across 21 units and approximately 294 nurses. As the highest level of care and the principal points of referral for high-risk cases in the state, both hospitals concentrate the kind of clinical acuity and patient throughput in which occupational stress is most likely to be pronounced.

### Population and sample size

The target population comprised all registered nurses working in the two hospitals (N = 714). The sample size was calculated with Yamane's formula for a finite population, $n = N / (1 + N(e)^2)$, using a tolerable error of 0.05, which yielded a minimum of 256 nurses. In the event, 259 nurses returned complete, analysable questionnaires, and this figure was used in all analyses.

### Sampling technique and eligibility

A stratified sampling procedure was applied in the two tertiary hospitals; proportionate allocation of the sample across the hospitals based on their nurse establishments; and consecutive recruitment of nurses within the clinical units. Registered nurses of either sex and any marital status, specialised in any area of nursing, who had been in active practice for at least two years and who were willing to take part, were eligible. The two-year threshold was set so that respondents had sufficient exposure to the work environment to report meaningfully on its stressors.

### Instrument for Data Collection

Occupational stress was measured with the Expanded Nursing Stress Scale (ENSS), originally developed by Grey-Toft and Anderson (1981) and revised by French, Lenton, Walters and Eyles (2000). The ENSS contains 50 items grouped into eight domains: death and dying, conflict with physicians, inadequate emotional preparation, problems with peers, problems with supervisors, workload, uncertainty concerning treatment, and patient and family, each rated on a four-point Likert scale (1 = never stressful, 2 = slightly stressful, 3 = moderately stressful, 4 = very stressful). In the original validation, the full scale returned a Cronbach's alpha of 0.96, with subscale alphas ranging from 0.65 to 0.88 (French et al., 2000). A domain mean of 2.50 and above was treated as indicating that the domain was a source of occupational stress, and a mean above 3.00 was taken to mark the most salient stressors.

For this study, the eight ENSS domains were read against the Demand–Control–Support framework. 'Problems with supervisors', 'problems with peers', 'conflict with physicians' and 'patient and family' were treated as indicators of the support and relational axis, while 'workload' served as the principal indicator of the demand axis. This mapping enabled comparison of the relative weight of relational stressors with that of staffing- and workload-related stressors within a single instrument.

### Ethical considerations

Ethical approval was obtained from the Human Research Ethical review boards of the Federal Medical Centre, Asaba, (FMC/ASB/A81 VOL XII/116) and the Delta State University Teaching Hospital, Oghara. Participation was voluntary, the purpose of the study was explained to respondents, and completion and return of the questionnaire was taken as consent. No personal identifiers were collected.

### Data collection

Two registered nurses who were not part of the study were recruited and trained as research assistants in each hospital. The questionnaire was self-administered: research assistants distributed it to eligible nurses and retrieved the completed copies. Respondents were permitted to complete the questionnaire in their own time.

### Data analysis

Data were analysed with SPSS for Windows version 27. Demographic characteristics and domain scores were summarised using frequencies, percentages, means, and standard deviations, and the eight ENSS domains were ranked by their mean scores to address the first and second objectives. Because the stress scores were ordinal and not normally distributed, non-parametric tests were used to examine demographic influences at an alpha level of .05. The Kruskal–Walli's test was used for variables with three or more groups (age, years of experience and, for completeness, marital status), and the Mann–Whitney U test was used for the two-group variable (gender).


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## Results

### Characteristics of the respondents

A total of 259 nurses participated. The largest age band was 31–40 years (40.2%), followed by 21–30 years (30.5%), 41–50 years (23.2%) and 51–60 years (6.2%). Most respondents were female (72.2%) and married (62.9%). Just under half had practiced for fewer than 10 years (48.6%), with 43.2% in the 10–20-year band and 8.1% beyond 20 years. Registered midwives formed the largest qualification group (47.5%), and only a small minority held a master's degree (1.2%). The profile is summarised in Table 1.

**Table 1.** *Demographic characteristics of the nurses (N = 259)*

| Characteristic | Frequency | Percentage (%) |
|---|---|---|
| *Age (years)* | | |
| 21–30 | 79 | 30.5 |
| 31–40 | 104 | 40.2 |
| 41–50 | 60 | 23.2 |
| 51–60 | 16 | 6.2 |
| *Sex* | | |
| Male | 72 | 27.8 |
| Female | 187 | 72.2 |
| *Marital status* | | |
| Single | 72 | 27.8 |
| Married | 163 | 62.9 |
| Widowed | 17 | 6.6 |
| Divorced | 7 | 2.7 |
| *Highest qualification* | | |
| Registered Nurse (RN) | 52 | 20.1 |
| Registered Midwife (RM) | 123 | 47.5 |
| BSc Nursing | 81 | 31.3 |
| MSc Nursing | 3 | 1.2 |
| *Years of experience* | | |
| < 10 | 126 | 48.6 |
| 10–20 | 112 | 43.2 |
| > 20 | 21 | 8.1 |

### Overall level of occupational stress

Taking moderate and severe ratings together, 65.4% of the nurses were occupationally stressed (32.9% severely and 32.5% moderately), a further 24.2% were slightly stressed, and only 13.4% reported no stress. Occupational stress was therefore the norm rather than the exception in this sample.

### Ranking of the ENSS domains (Research question 1)

When the eight domains were ranked by mean score, the relational domains ranked highest. 'Problems with supervisors were the single most stressful domain (M = 3.30), followed by 'patient and family' (M = 3.20) and then 'workload' (M = 3.17); these three were the only domains with means above 3.00. 'Uncertainty concerning treatment' (M = 2.86), 'conflict with physicians' (M = 2.80) and 'death and dying' (M = 2.71) occupied the middle of the distribution, all above the 2.50 threshold and therefore still meaningful sources of stress. The two lowest-ranked domains 'problems with peers' (M = 2.39) and 'inadequate emotional preparation' (M = 2.23) fell below 2.50 and were not, on this criterion, salient stressors. The full ranking is presented in Table 2.

**Table 2.** *ENSS domains ranked by mean stress score, mapped to the Demand–Control–Support axes*

| Rank | ENSS domain | Mean | DCS axis |
|---|---|---|---|
| 1 | Problems with the supervisor | 3.30 | Support/relational |
| 2 | Patient and family | 3.20 | Support/relational |
| 3 | Workload | 3.17 | Demand |
| 4 | Uncertainty concerning treatment | 2.86 | Demand |
| 5 | Conflict with physicians | 2.80 | Support/relational |
| 6 | Death and dying | 2.71 | Demand |
| 7 | Problems with peers | 2.39 | Support/relational |
| 8 | Inadequate emotional preparation | 2.23 | Demand |

*Note.* Means scored on a 1–4 scale. Domains with a mean ≥ 2.50 were treated as sources of stress; domains with a mean > 3.00 were treated as the most salient stressors.

### Supervisory and interpersonal stressors versus workload (Research question 2 and H1)

The central comparison of the study concerned whether supervisory and interpersonal stressors outweighed staffing- and workload-related stressors. Two of the three relational domains examined, 'problems with supervisor' (M = 3.30) and 'patient and family' (M = 3.20), were ranked above 'workload' (M = 3.17), and all three carried means above 3.00. The gap between the top relational domain and the workload was 0.13 scale points. Although the difference between workload and patient-and-family is narrow, the ordering is consistent: the highest single stressor in the entire instrument was a relational one, the supervisory relationship. 'Conflict with physicians, a further interpersonal domain, also exceeded the 2.50 threshold (M = 2.80). This suggests


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that the relational domains did not merely match workload; the most salient of them surpassed it. H1 was therefore supported, supervisory and interpersonal stressors contributed at least as strongly as, and at their peak more strongly than, staffing/workload stressors.

**Influence of age on occupational stress (Research question 3 and H2)**

The Kruskal–Walli's test showed a statistically significant effect of age on occupational stress (H = 16.684, df = 3, p = .001). The mean ranks fell steadily across the younger bands and were lowest in the older bands: the 21–30-year group held the highest mean rank (148.42), followed by the 31–40 group (136.22), with the 41–50 group lowest (98.30) and the 51–60 group intermediate (117.50). The null hypothesis was rejected. The youngest nurses carried the heaviest stress burden, so H2 that younger nurses are more stressed was supported. The results are shown in Table 3.

**Table 3.** *Kruskal–Walli's test of the influence of age on occupational stress*

| Age group (years) | 21–30 | 31–40 | 41–50 | 51–60 | H | p |
|---|---|---|---|---|---|---|
| N | 79 | 104 | 60 | 16 | | |
| Mean rank | 148.42 | 136.22 | 98.30 | 117.50 | 16.684 | .001* |

*Note.* df = 3. * Significant at p < .05.

**Influence of years of experience on occupational stress (Research question 3 and H3)**

Years of experience also significantly influenced occupational stress (H = 8.002, df = 2, p = .02). Nurses with fewer than ten years of experience held the highest mean rank (142.59), those with 10–20 years the lowest (115.16), and those with more than twenty years an intermediate rank (133.62). The null hypothesis was rejected, and because the least experienced nurses were the most stressed, H3, that less-experienced nurses are more stressed, was supported. The results are shown in Table 4.

**Table 4.** *Kruskal–Walli's test of the influence of years of experience on occupational stress*

| Years of experience | < 10 | 10–20 | > 20 | H | p |
|---|---|---|---|---|---|
| N | 126 | 112 | 21 | | |
| Mean rank | 142.59 | 115.16 | 133.62 | 8.002 | .02* |

*Note.* df = 2. * Significant at p < .05.

**Gender and marital status**

For completeness, two further demographic variables were examined. Neither was significant. The Mann–Whitney U test found no significant difference in stress between male and female nurses (U = 5845.00, Z = −1.642, p = .10), and the Kruskal–Walli's test found no significant influence of marital status (H = 3.833, df = 3, p = .28). The demographic signal in these data therefore ran specifically through age and experience, not through gender or marital status.

## Discussion

The headline finding of this study is that the most stressful aspect of nurses' work in these tertiary hospitals was not the volume of the work but the supervisory relationship through which it was managed. 'Problems with supervisor' topped the ranking, 'patient and family' came second, and both outranked 'workloads. This is a meaningful reordering of the usual hierarchy, which is why the study's framing, looking beyond staffing shortages, is warranted.

The result was contrasting to a substantial body of work in which workload is the first-named stressor (Danjin et al., 2016; Etim et al., 2015; Kassa et al., 2017;). There are at least two ways to read the divergence. The first is contextual. Where earlier findings of workload dominance have been published and acted upon, administrators may have introduced measures redistributing tasks, adjusting shift patterns that took some of the edge off the workload signal, allowing relational stressors to surface more clearly. The setting also shapes the salience of any given stressor: in environments marked by conflict, instability or surges in demand, workload may swamp everything else, whereas in a comparatively stable setting, other factors can come to the fore. The second reading is that the relational signal was always present in the data, but tended to be overshadowed by the workload narrative. Studies that looked specifically at relational factors have repeatedly found them to be powerful: supervisory relationships and role conflict led the stressor ranking among Indonesian nurses (Muazza, 2013), trust in the supervisor was a primary predictor of stress severity in a large Polish sample (Chudzicka-Czupala et al., 2022), and recent ENSS-based studies have explicitly placed supervisor problems among the top stressors for nurses (Estadilla et al., 2025; Saefurrohim & Wibawani, 2025; Zerman, 2025). The present findings sit squarely within that emerging line of evidence.

Contemporary research continues to demonstrate that supervisory support is a critical job resource that protects employee well-being in demanding work environments. Drawing on the Job Demands–Resources (JD-R) framework, recent studies show that supportive supervisors help employees manage workload pressures, reduce stress and burnout, and enhance motivation, engagement, and psychological well-being. Supervisory support functions as a buffering resource by mitigating the adverse effects of excessive job demands while promoting employees' capacity to cope effectively with workplace challenges. Consequently, employees who perceive higher levels of supervisor support report better mental health outcomes, greater job satisfaction, and stronger organizational commitment, even under conditions of high work pressure (Hammer et al., 2024; Geraldes et al., 2024; Jing et al., 2024). A poor supervisory relationship withdraws exactly that buffer, and an unsupportive or conflict-laden supervisor can convert otherwise manageable demands into genuine strain. It is consistent with this that research on abusive supervision has shown how a damaged manager relationship undermines the basic


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psychological needs that ordinarily protect workers (Wang et al., 2024), and that a German qualitative study found nurses and supervisors disagreeing over responsibility for stress even as both acknowledged interprofessional conflict and a lack of appreciation as live problems (Helaß et al., 2025). Read through this lens, the prominence of 'problems with supervisor' is not an anomaly; it is what the model predicts when the support axis fails.

The high ranking of 'patient and family' points to a second, related form of relational strain. Nurses absorb the distress, demands and grief of patients and relatives at close range and over long hours, and this emotional labour is taxing in a way that no count of beds or tasks captures. Earlier work has likewise found contact with patients and families to be among the strongest stressors nurses report (Apeksha & Mahadeo, 2014;). That conflict with physicians also cleared the threshold for a meaningful stressor reinforces the broader pattern: the interprofessional and interpersonal texture of the workplace, taken together, is doing at least as much to drive stress as workload is. By contrast, 'problems with peers ranked low, which suggests that horizontal relationships among nurses were a relative source of solidarity rather than a strain, a reminder that not all relationships at work pull in the same direction, and that the vertical relationship with supervisors is the one most in need of attention.

The demographic findings complete the picture and align closely with the wider literature. Age and years of experience both significantly influenced stress, and in both cases, the burden fell on the younger and the newer. The same gradient has been reported among Ethiopian and Iranian nurses (Hashemian et al., 2015; Kassa et al., 2017), among construction professionals for whom age moderated the effect of role conflict (Dodanwala et al., 2021), and among financial professionals for whom age and experience were inversely related to stress (Kutebayev et al., 2024). The likeliest explanation is developmental rather than dispositional: with time, nurses adapt to recurring stressors and accumulate a repertoire of coping strategies, building a tolerance that newer staff have not yet had the chance to develop (Bartkowiak et al., 2022). It is notable that gender and marital status, by contrast, were not significant here, which echoes studies that found socio-demographic factors such as age mattered while others did not, and helps to specify which demographic levers are worth pulling.

### Implications for Practice

The supervisory relationship deserves to be treated as a target of intervention, not as a soft adjunct to staffing policy. Strengthening the quality of supervision through training that builds supportive, communicative leadership, through structures that give nurses a voice and a measure of control over how their work is done, and through mechanisms to surface and resolve inter-professional conflict, addresses the support axis identified by the Demand–Control–Support model as decisive. Investing only in headcount, while ignoring the relational climate, would leave the largest single stressor untouched. Second, because the burden falls disproportionately on the young and inexperienced, targeted support for early-career nurses, as well as structured mentorship, orientation, and preceptorship that pair newer staff with seasoned colleagues, is likely to yield disproportionate benefit. This does not mean workload should be neglected; it ranked third and remains a genuine stressor. The argument is one of balance: a strategy that treats supervisory support, patient-and-family demands and workload as co-equal priorities is better matched to these data than one that reduces nursing stress to a staffing problem.

### Strengths and limitations

The study's strengths include the use of a well-validated, domain-structured instrument that allowed relational and workload stressors to be compared directly within a single measure, a sample drawn from the full tertiary-hospital establishment of an entire state, and an explicit theoretical framework. Several limitations should temper interpretation. The cross-sectional design captures associations at a single point in time and cannot establish causal direction. Respondents completed questionnaires in their own time and without supervision, which may have introduced recall or social-desirability bias. The analysis examined four demographic variables: age, gender, marital status and experience, but many other factors plausibly shape occupational stress, including shift pattern, clinical specialty, remuneration, and personal circumstances, which were not modelled. The differences among the top three domains, while consistent in their ordering, are modest in absolute terms and should not be over-interpreted as a strict hierarchy. Finally, the study was confined to two tertiary hospitals in one Nigerian state, so generalisation to other levels of care or other settings should be made with caution.

## Conclusions

Among nurses in these tertiary hospitals, occupational stress was widespread, and its leading source was relational rather than volumetric. The supervisory relationship was the single most stressful domain measured, patient-and-family demands ranked second, and both outweighed workloads, a pattern that fits the Demand–Control–Support model's emphasis on social support as a buffer against strain. The burden fell most heavily on younger, less experienced nurses, while gender and marital status did not make a significant difference. These findings argue for looking beyond staffing shortages: improving the quality of supervisory support, managing interprofessional and patient-related friction, and protecting early-career nurses belong alongside workforce numbers at the Centre of any serious strategy to reduce nursing stress and safeguard the quality of care that follows.

### Declarations

### Ethics approval and consent to participate

Ethical approval was obtained from the Health Research ethical review boards of the Federal Medical Centre, Asaba, and the Delta State University Teaching Hospital, Oghara. All participants were informed of the study's purpose; participation was voluntary, and returning the completed questionnaire was considered informed consent. The study was conducted in accordance with the principles of the Declaration of Helsinki.

### Consent for publication

Not applicable; the manuscript contains no person's data in any form.

### Availability of data and materials

The datasets generated and analysed during the current study are available from the corresponding author on reasonable request.

### Competing interests

The authors declare that they have no competing interests.

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