

Lived Experience of Work-Related Musculoskeletal Pain among Emergency Nurses in Sarawak: A Heideggerian Phenomenological Study

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ABSTRACT

Background: This study explored the lived experience of work-related musculoskeletal pain among emergency nurses at Sarawak General Hospital, perceived contributing factors, and coping strategies used to manage the pain.

Methods: An interpretive Heideggerian phenomenological design guided by Van Manen's hermeneutic approach was employed. Purposive sampling recruited 12 emergency nurses with self-reported work-related musculoskeletal pain. Semi-structured, in-depth individual interviews were conducted in Sarawakian Malay according to participants' preferences. Interviews were audio-recorded, transcribed verbatim, and manually analysed using lifeworld-oriented thematic interpretation.

Results: Work-related musculoskeletal pain was experienced as more than a physical symptom, representing an embodied disruption affecting movement, posture, comfort, stamina, and daily functioning. Pain was often normalised as part of nursing work and silently endured to maintain professional responsibilities and patient care. Participants associated pain with repetitive patient handling, prolonged standing, awkward postures, understaffing, workload pressures, shift demands, and limited recovery opportunities. Coping strategies included rest, analgesics, stretching, self-massage, and endurance-based self-management; however, these measures were largely temporary and insufficient to address underlying workplace conditions. Four themes emerged: (a) pain as an embodied disruption to work and daily functioning; (b) pain as normalised and silenced as part of being a nurse; (c) organisational and work-process factors intensifying pain; and (d) coping as necessary but temporary and insufficient.

Conclusion: Work-related musculoskeletal pain among emergency nurses should be understood as an embodied and organisationally shaped occupational burden rather than an individual physical complaint. Prevention requires system-level interventions, including safe staffing, ergonomic support, recovery-enabling work design, and accessible occupational health measures.

Keywords: Musculoskeletal pain; Emergency nursing; Occupational health; Qualitative research; Malaysia

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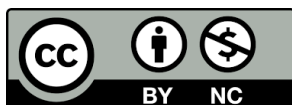
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INTRODUCTION

Work-related musculoskeletal pain is a persistent occupational health concern in nursing and remains one of the most common forms of work-related morbidity affecting the profession. Evidence has consistently shown that nurses experience a substantial burden of musculoskeletal problems, particularly in the lower back, neck, and shoulders (1–3). In healthcare settings, these problems are closely linked to the physical demands of patient care, including lifting, transferring, repositioning, and prolonged standing (2,4–9). Collectively, these findings indicate that musculoskeletal pain among nurses is not an isolated or minor discomfort, but a widespread occupational issue with implications for workforce health and service delivery.

The issue is relevant in emergency nursing. Emergency departments are characterised by high patient turnover, unpredictable case acuity, interrupted nursing care, rapid decision-making, prolonged standing, repeated bending, patient transfers, and sustained exposure to time pressure (7,9–13). These conditions create a physically and psychologically demanding work environment in which opportunities for recovery may be limited (13). Therefore, musculoskeletal pain in emergency settings should not be understood solely through biomechanical exposure, but also through a broader organisation of work, including shift patterns, workload, and psychosocial strain.

Beyond its frequency, work-related musculoskeletal pain matters because its consequences for nurses' functioning, retention, and care delivery. A high musculoskeletal burden can undermine work sustainability, contribute to fatigue, and reduced physical capacity, and create risks for longer term occupational impairment (2,7,13–16). It may also affect patient safety when nurses continue to work while physically strained (17). These observations reinforce the need to frame musculoskeletal pain as both a clinical and organisational concern rather than merely an individual complaint.

In Malaysia, the problem has been documented, but the evidence base remains weighted towards prevalence studies and risk factor surveys (7,18–20). Malaysian studies have reported substantial musculoskeletal discomfort among nurses and significant

associations with psychosocial risk factors and emotional distress (19). Research from Sarawak has also highlighted the extent of work-related musculoskeletal disorders among nurses and pointed to contextual issues such as staffing shortages and physical demands (18,20). While such findings are important, they mainly describe the scale and correlates of the problem. However, they do not fully explain what pain means in the everyday world of emergency nursing, how it is interpreted, how it is endured, or how it shapes professional practice over time.

This gap is important because musculoskeletal pain is not experienced only as tissue strain or bodily discomfort. In practice, it is lived through movement, fatigue, duty, silence, adaptation, and the ongoing need to continue working despite pain. A purely epidemiological account cannot capture how pain is normalised, underreported, negotiated during shifts, or entangled with professional identity and responsibility to patients. Understanding these lived meanings is essential if occupational health responses are to address not only symptoms, but also contexts that sustain them.

Hence, an interpretive phenomenological approach is appropriate for examining this phenomenon. By focusing on lived experience, it allows investigation of how emergency nurses encounter work-related musculoskeletal pain in the context of their everyday clinical world, how they make sense of it, and how workplace conditions shape that experience (21,22). Such an approach is valuable in emergency nursing, where bodily strain, emotional pressure, and organisational constraints intersect in ways that may not be adequately represented through quantitative measures alone.

Accordingly, this study aimed to explore the lived experience of work-related musculoskeletal pain among emergency nurses at Sarawak General Hospital, to examine the factors perceived to contribute to that pain, and to describe the coping strategies used to manage it. By illuminating pain as an embodied, professional, and organisationally situated experience, the study seeks to contribute contextually grounded knowledge that can inform nursing management, occupational health support, and safer emergency practice in Malaysia.

METHODS

Study Design

An interpretive Heideggerian phenomenological design (23,24) was selected because the study sought to interpret how emergency nurses lived with and made meaning of work-related musculoskeletal pain within their everyday clinical world. Heideggerian phenomenology was preferred because it recognises experience as situated within being-in-the-world, professional relationships, bodily practice, and workplace context. Van Manen's hermeneutic approach guided the study by sensitising the analysis to lived body, lived time, lived space, and lived relation. This allowed the analysis to move beyond describing pain symptoms towards interpreting how pain was lived through the body, emergency work culture, professional responsibility, silence, and institutional constraints (25,26).

Study Setting

The study was conducted in the Emergency Department of Sarawak General Hospital, a major tertiary referral hospital in Sarawak, Malaysia. The emergency department is a high-demand clinical environment characterised by unpredictable patient flow, urgent care demands, prolonged standing, repeated movement, and frequent patient handling activities (7,9–13). These features made the setting appropriate for examining the lived experience of work-related musculoskeletal pain among nurses.

Participants and Sampling

Nurses were recruited using purposive and homogenous sampling. The emergency department sister-in-charge helped disseminate the screening for, to nursing staff. In total, 60 nurses received the screening form, 43 returned it, 27 met the inclusion criteria, 13 declined participations due to lack of interest or time constraints, and 14 nurses consented and were interviewed. Twelve transcripts were included in the final analysis. Recruitment stopped when sufficient depth and thematic richness were achieved.

A sample of 12 was considered appropriate for a homogenous phenomenological study because the aim was interpretive depth rather than statistical representation and no new insights emerged during later interviews (27).

Data Collection

The duration of data collection was conducted within 4 months, from June to October 2024. Data were collected through semi-structured and face-to-face individual interviews using an interview guide developed from the literature and reviewed by qualitative experts. This method was chosen to allow nurses to describe the pain experiences in their own words while giving the researcher flexibility to probe meanings, situations, and responses in greater details (28). Most interviews were conducted in a private area within the emergency department, based on nurses' availability and work schedule. One interview was conducted in a hospital café at the nurse's request. Interviews were conducted by first author, mainly during working hours, while one interview was conducted outside working hours. Privacy and confidentiality were maintained throughout the interview process by ensuring the discussion took place away from other staffs and patients as far as practicable. Each interview lasted approximately 90 minutes or less. Interviews explored descriptions of pain, work situations that triggered or worsened pain, responses to pain during shifts, reporting behaviour, and coping strategies. Example guiding questions included: "Can you describe what your pain feels during work?", "What work situations usually make the pain worse?" and "How do you manage the pain during and after your shift?". Interviews were conducted according to nurses' preference in Sarawakian Malay, which enabled nurses to express personal and work-related experiences more naturally and comfortably. Each interview was audio-recorded with nurse consent and later transcribed verbatim. Field notes were also maintained to capture non-verbal cues, contextual observations and immediate reflections that could support interpretation during analysis (29,30). No repeat interviews were conducted, and transcripts were not returned to nurses due to time and shift constraints. However, credibility was supported through verbatim transcription, field notes, reflexive memoing, and close alignment between quotations and interpretations.

Data Analysis

The interview data were analysed manually using a lifeworld-oriented thematic interpretation informed by van Manen's hermeneutic approach (21,22) which views

lived experience as situated within body, time, space, language, relationships, and professional context. Van Manen's hermeneutic phenomenology guided the analysis by supporting movement between nurses' specific accounts and the broader meaning of work-related musculoskeletal pain in emergency nursing. The lifeworld existential were used as sensitising concepts rather than a fixed coding framework, allowing the analysis to remain close to nurses' accounts while interpreting how pain was lived through the body, clinical environment, work rhythm, professional responsibility, and coping practices.

Braun and Clarke's reflexive thematic analysis was used to generate interpretive themes across the interview data. This approach was appropriate because it recognises the author's reflexive role in the development and supports interpretive, rather than purely descriptive analysis (31). All analysis was conducted manually to maintain close engagement with nurses' language, context, and meaning (32).

Interview were transcribed verbatim in the original Sarawakian Malay. The author repeatedly read each transcript and reviewed field notes to become familiar with the data and to retain contextual data. Reflexive memos were written throughout the process to document early impressions, assumptions, coding decisions, and emerging interpretations.

Initial coding was conducted manually and inductively using line-by-line reading of the transcripts. Codes captured meanings related to bodily pain, emotional responses, work performance, professional responsibility, workplace conditions, reporting behaviours and coping strategies. Coding was not treated as mechanical labelling. Instead, each code was interpreted in relation to the nurses' full account and the overall study aim. For example, continuing to work despite pain was interpreted not only as physical endurance, but also in relation to professional duty, pain normalisation, workplace expectations, and limited organisational response.

Similar codes were then compared and clustered into subthemes and candidate themes. Themes were developed by identifying patterns of shared meaning across nurses' accounts rather than repeated words or ideas. Candidate themes were reviewed for

internal coherence and external distinctiveness. Themes were refined. Merged, renamed, or discarded where necessary to ensure that the final themes represented interpretive patterns explaining how work-related musculoskeletal pain was experienced, normalised, and managed by emergency nurses.

Reflexivity was maintained throughout the analysis. The author used analytic memos to examine how prior understanding of musculoskeletal pain, emergency nursing work, and occupational strain could influence interpretation. This helped prevent the findings from being reduced to a purely physical explanation of pain. Through repeated engagement with the data, pain was interpreted as an embodied, emotional, professional, and organisationally shaped experience.

Translation and Cross-language Handling

As the interviews were conducted in Sarawakian Malay and the manuscript was prepared in English, translation as handled carefully to protect nurses' meanings. The full transcripts were not translated into English before analysis. Instead, analysis was conducted using the original Sarawakian Malay transcripts to preserve local expressions, emotional tone, and culturally specific meanings related to pain, tiredness, endurance, and coping. Translation into English was performed by the first author after the themes had been finalised. Only selective illustrative quotations used in the manuscript were translated. A formal back-translation process was not conducted. However, translated quotations were checked against the original Sarawakian Malay transcripts to ensure that the meaning, emotional tone, and intended message were retained. Where local expressions did not have a direct English equivalent, translation prioritised conceptual equivalence, rather than literal word-for-word conversion (33). Quotations were lightly edited for readability in English while preserving the nurses' original meaning and tone. Informal expressions, pauses, and emotionally meaningful phrases were retained where they helped conveyed the nurses' lived experiences. This approach allowed the manuscript to present quotations directly for English language readers while reducing the risk of meaning shift during translation. It also supported analytic depth, cultural sensitivity,

and trustworthiness in reporting multilingual qualitative data (33,34).

Trustworthiness

Several strategies were used to enhance the trustworthiness of the study. Credibility was supported through in-depth engagement with nurses' narratives, verbatim transcription, and close alignment between the data and thematic interpretation. Dependability was strengthened by maintaining a transparent analytic process and documenting key interpretive decisions throughout the study. Confirmability was supported through reflexive attention to the researcher's assumptions and on-going self-awareness during interpretation. Transferability was addressed by providing sufficient contextual description of the setting, nurses, and study process so that readers may judge the relevance of the findings to similar clinical environments (35).

The first author's professional familiarity with emergency nursing provided contextual understanding but also created a risk of assuming shared meanings with nurses. To manage this, the researcher maintained a reflexive journal and analytic memos before and after interviews, documenting assumptions about pain, workload, patient handling, and the normalisation of discomfort among nurses. During analysis, these pre-understandings were reviewed so that interpretations remained grounded in nurses' accounts rather than own researcher's own clinical experience. Reflexive engagement helped shift the analysis from viewing pain mainly as a physical occupational problem

towards understanding it as an embodied, emotional, professional and organisationally shaped experience.

Ethical Considerations

Ethical approval was obtained from the Medical Research and Ethics Committee (NMRR ID-23-03204-3FA) and International Islamic University Malaysia Research and Ethics Committee before data collection. Permission to conduct the study was also secured from Sarawak General Hospital Clinical Research Centre. All nurses received information about the purpose of the study, the voluntary nature of participation, and their right to withdraw at any time without consequences. Written informed consent was obtained before each interview. Confidentiality and anonymity were protected using pseudonyms and coded identifiers. All data were stored securely and accessed only by the research team.

RESULT

A total of 12 emergency nurses participated in the study. Direct quotations will be anonymised and attributed using fictitious, name-like pseudonyms (SN Amy, SN Ethan etc). These pseudonyms are not derived from nurses' real names, initials, or staff identifiers. "SN" was implied as "Staff Nurse" and used as a neutral and did not indicate rank or registration status. These demographic data details are provided to contextualise the nurses' accounts and support transferability, rather than to compare experience statistically (Table 1).

Table 1: Sociodemographic Data of Participants (N = 12)

Pseudonyms	Age	Ethnicity	Gender	Years of service in ED SGH	Area of Pain
Amy	31 years old	Malay	Female	3 years	Back
Batrisha	29 years old	Malay	Female	6 years	Back
Clarence	35 years old	Iban	Male	10 years	Back and legs
Diana	25 years old	Iban	Female	4 years	Legs
Ethan	31 years old	Chinese	Male	5 years	Back and neck
Fathin	31 years old	Malay	Female	6 years	Legs
Ghani	31 years old	Malay	Male	7 years	Back and legs
Hana	24 years old	Melanau	Female	1 year	Wrist
Ian	30 years old	Bidayuh	Male	6 years	Back and legs
Julia	32 years old	Iban	Female	7 years	Legs
Kathy	34 years old	Iban	Female	11 years	Back
Lily	24 years old	Bidayuh	Female	1 year	Legs

Across the interviews, nurses described work-related musculoskeletal pain as a recurring and meaningful part of their professional lives rather than an occasional physical complaint. Their findings show that pain was experienced as an embodied disruption. However, it was also normalised within everyday nursing work and intensified by organisational conditions. Nurses employed different coping strategies to manage their pain, but these measures were often necessary and only partially effective. Four themes were generated from the analysis.

Theme 1: Pain as an Embodied Disruption to Work and Daily Functioning

Pain was not experienced merely as a physical symptom located in the back, legs, shoulders, neck or feet. It changed how nurses lived through and used their bodies during emergency nursing work. The body becomes a source of discomfort, limitation, and constant self-monitoring. Pain interrupted the usual flow of nursing practice ordinary clinical movements more effortful.

"It did affect my work performance. If the pain attacks me, I felt very uncomfortable. I need someone to cover my work for a while for me to take a rest...If I am alone that time, just pause my work for few minutes... I just endure the pain which makes me very stressed."

(SN Kathy)

This account shows that pain disrupted more than physical comfort. It affected work continuity, emotional control, and the nurse's ability to remain fully available in a fast-paced clinical setting. Pain caused the working body visible to the nurse as something vulnerable and unreliable. Instead of simply performing care, nurses had to negotiate with their own bodily limits while still meeting patient care demands.

Pain also altered how nurses moved within the clinical environment. Movements that were usually automatic, such as bending, cannulation, blood taking, lifting, or repositioning patients, eventually required caution and bodily adjustments. Nurses also experienced pain through the way work had to be performed.

"Since I have back pain, I have always try my best to practice good ergonomics but our beds are in bad condition. I need to bend down

further... sometimes I need to kneel down to do cannulation or blood taking."

(SN Ian)

This illustrates a tension between knowing safe ergonomic practice and being unable to practice it consistently. Therefore, pain was not simply the result of poor individual technique. It emerged from the mismatch between nurses' embodied intention to work safely and the material conditions of the emergency department. The disruption extended beyond working hours. Nurses carried pain home, where it affected rest, sleep, household responsibilities, and overall physical recovery. This showed that work-related musculoskeletal pain did not end when duty ended. It travelled with nurses into their personal lives and reduced the body's opportunity to recover.

"I always having leg pain. Tiring type one. At the end of the day, it feels so hurt sometimes I feel want to cry on bed."

(SN Fathin)

Theme 2: Pain Was Normalised and Silenced as Part of Being A Nurse

Pain was commonly interpreted as an expected part of emergency nursing. Rather than being treated as an occupational health issue requiring early action, musculoskeletal pain was often absorbed into the culture of nursing work. Nurses described pain as something ordinary, natural, and almost unavoidable in the emergency department.

"I think there is no use telling sister about the pain. Nothing can be done. It seems like natural to have musculoskeletal pain in this nursing job."

(SN Amy)

Silence was also shaped by professional identity. Nurses appeared to associate endurance with being responsible, reliable and committed. To continue working despite pain became part of maintaining one's role as a nurse. Hence, silence functioned as a professional strategy. It helped nurses avoid appearing weak, burdensome or unable to cope.

"Since I didn't show my sickness to anyone, I think sister also didn't know that I have severe back pain. If she knows, she can do nothing about it!"

(SN Batrisha)

This account suggests that underreporting was not only caused by lack of awareness. It was connected to the belief that disclosure would not change the situation. Therefore, pain was hidden because nurses perceived that the system had limited capacity to respond.

Normalisation and silence created a cycle in which pain remained present and institutionally invisible. Nurses continued to work, colleagues also appeared to endure similar pain, and formal support was not actively sought. Eventually, pain became embedded within everyday nursing practice while its seriousness remained understated.

Theme 3: Organisational and Work Process Factors Intensified Pain

Nurses did not describe pain as arising from isolated physical tasks alone. Instead, pain was produced and intensified through the organisation of emergency nursing work. Patient handling, prolonged standing, awkward positioning, malfunctioned equipment, limited manpower, and urgent clinical demands interacted to create repeated bodily strain.

"I am always lifting and transferring patients up, using 'pinky'. But sometimes, we don't have 'pinky', so we must lift patient up manually like using our own force to do it. That will cause is to have back pain. It is worse if the patient is big size."

(SN Lily)

This quotation shows how the absence or unavailability of equipment transformed patient care into bodily risk. Nurses were required to compensate for system limitations using their won physical strength. The nurse's body became the substitute for insufficient resources.

Understaffing further intensified this strain. When manpower was limited, nurses had fewer opportunities to share physical tasks, rest briefly, or practice safer body mechanics. In emergency care, where response time is critical, the urgency of patient care often overrode the nurse's ability to protect their own body.

"Every week, I will do double shifts once and night shifts once per week. Two or three nights consecutively. If sister gave me early day off, then I don't have any off-day post night shift. The worst thing is if she gives me double shift

then morning shift post sleeping day. That's super tiring. My body aches."

(SN Fathin)

This account highlights the temporal dimension of pain. Pain was shaped not only by what nurses did, but by how work time was organised. Consecutive shifts, double shifts, and insufficient recovery compressed the body's opportunity to rest. Fatigue accumulated, and the body became less able to recover from repeated strain.

The emergency department environment also shaped how pain was experienced. Busy zones, documentation demands, procedures, and limited breaks created a work rhythm in which nurses' bodily needs were postponed.

"Usually, we will get extra busy in yellow zone. We consider it as an active zone... lots of documentations and procedures needs to be done. Some days, I don't have time to eat and toilet breaks."

(SN Julia)

This shows that musculoskeletal pain was connected to the border rhythm and structure of emergency care. The department demanded continuous availability of nurses, while offering limited space for bodily recovery. Therefore, pain was not only located in the nurse's body, but it was also generated through the way emergency nursing work was organized, resourced, and paced.

Theme 4: Coping Was Necessary, But Often Temporary And Insufficient

Coping strategies were central to how nurses continued working despite pain. Nurses used massage, painkillers, topical medication, stretching, posture adjustment, short rest, and careful movement. However, these strategies were not experienced as complete recovery. They were practical attempts to remain functional within conditions to continue to produce pain.

"Once a month, I will go to Capsule to have sport therapy massage. It really helped to reduce the pain."

(SN Clarence)

"I take Paracetamol to relieve the pain. I bring the stock to hospital in case I need it in the middle of shift."

(SN Ghani)

These accounts suggest that coping was anticipatory as well as reactive. Nurses prepared themselves to manage pain because they expected pain to occur during work. Carrying medication to the hospital, seeking massage, and adjusting posture were ways of maintaining readiness for duty. Therefore, coping became part of nurses' work survival routine. However, coping was constrained by time, family responsibilities, shift work, and limited opportunities for meaningful rest. Nurses often knew what helped them, but they could not practice these strategies consistently.

"Sometimes I will go for massage. Maybe once in one or two three months. Don't have much time. Because I usually go directly home to Samarahan after shift ends. I just lay back and relax. But still, there is not enough time to rest. I need to settle down house chores... cooking, doing laundry, taking care for my little girl."

(SN Diana)

This account shows that recovery was shaped by life beyond the workplace. The nurse's body moved from clinical labour to domestic responsibility, leaving limited time for rest. Hence, coping was not only a matter of personal discipline or health awareness. It was constrained by work schedules, family roles, travel, and lack of recovery time.

Overall, coping functioned as constrained self-preservation. It allowed nurses to continue working, but it did not remove the organisational and ergonomic conditions that sustained pain. These strategies helped nurses endure, but they did not fully protect them. Coping should not be interpreted as evidence that pain was adequately managed. It showed how nurses adapted to recurring strain to remain productive and professionally available.

Collectively, the findings show that work-related musculoskeletal pain among emergency nurses was experienced as an embodied and ongoing disruption shaped by clinical tasks and organisational conditions. Pain was frequently normalised within professional culture, carried silently, and managed through insufficient coping strategies to interrupt its recurrence. These findings indicate that musculoskeletal pain should be understood as a nursing practice concern.

DISCUSSION

This study explored the lived experience of work-related musculoskeletal pain among emergency nurses in Sarawak. It showed that pain was experienced as an embodied and recurring disruption shaped by clinical demands, professional culture, and organisational conditions. The findings suggest that musculoskeletal pain in emergency nursing is best understood as a multidimensional occupational experience that affects bodily comfort, emotional well-being, work performance, and professional endurance. This interpretation is consistent with wider nursing evidence showing that work-related musculoskeletal pain is highly prevalent and carry significant consequences for nurses' physical and mental health (1,8,9,17,36,37).

Pain as Embodied Disruption

The findings show that work-related musculoskeletal pain was experienced as an embodied disruption to emergency nursing practice. Nurses did not describe pain only as discomfort affecting specific body regions such as back, neck, shoulders, legs, or feet. Instead, pain changed how they moved, lifted, stood, bent, and sustained their attention during clinical work. Tasks that were usually performed automatically became more cautious, effortful, or interrupted. This finding extends existing occupational health evidence by showing how known physical risk factors, including patient handling, transferring, repositioning, prolonged standing, and awkward posture are lived in the immediate context of emergency nursing care (2,4–9). In emergency nursing, the body is central to practice. Nurses rely on bodily strength, speed, endurance, and responsiveness to meet urgent patient care demands. When pain occurs, the body becomes less reliable and more visible to the nurses as a source of limitation. From an interpretive phenomenological perspective, pain interrupts the ordinary flow of nursing practice. The working body, which usually remain in the background while nurses focus on patients, becomes foregrounded through discomfort, fatigue, and restricted movement. This means that musculoskeletal pain affects more than bodily discomfort. It also shapes professional functioning, work continuity, emotional control, and the ability to remain fully available during demanding shifts (38). Therefore, the findings support the need to

understand pain as a lived occupational experience rather than as physical complaint alone.

Pain Normalisation and Professional Silence

The findings also show that musculoskeletal pain was frequently normalised within nursing culture. Nurses described pain as expected, ordinary, or natural in emergency nursing. This suggests that pain has become embedded in the professional culture of nursing work rather than being treated as an occupational health issue requiring early attention. This normalisation is important because it shifts pain from an organisational concern to an individual responsibility. When pain is viewed as “part of the job”, nurses may be less likely to report it, seek support, or expect any meaningful response from management. This finding is consistent with evidence that nurses may continue working despite pain instead of seeking timely intervention (38). It also aligns with literature on underreporting and organisational silence, where workers may withhold concerns when they believe reporting will not lead to change or may expose them to judgement (38–40). In this study, silence was not simply the absence of reporting. It reflected the nurses’ understanding of professional responsibility. Enduring pain allowed nurses to remain available for patients, avoid burdening colleagues, and maintain an image of resilience. However, this silence may delay intervention and allow unsafe ergonomic, staffing, workload conditions to persist. Hence, pain normalisation should be understood as a professional and organisational issue, not merely as an individual attitude.

Organisational Production of Pain

The findings indicate that musculoskeletal pain was produced through the organisation of emergency nursing work, not only through isolated physical tasks. Nurses linked their pain to manual patient handling, prolonged standing, awkward position, unavailable or unsuitable equipment, understaffing, high workload, shift patterns, and limited recovery time. Evidence among emergency nurses has shown that musculoskeletal pain is associated with work schedules and psychosocial strain, highlighting that organisational and emotional conditions are also important in shaping pain experiences.(14–16,37). These conditions interacted to create repeated bodily strain.

The interpretation moves the discussion beyond a purely a biomechanical explanation. Emergency nursing requires rapid multitasking, immediate response to acute cases. Unpredictable patient flow and sustained physical readiness. These conditions often leave limited space for ideal posture, careful pacing, safe body mechanics, or restorative breaks (7,9–13). As a result, pain cannot be explained only by poor individual technique or lack of ergonomic knowledge. It is reinforced by the pace, staffing, equipment, and time pressure of emergency care. The findings also suggest that physical strain was intensified by emotional and professional pressure. Nurses continued working despite pain because patient care remained urgent and unavoidable. In this context, musculoskeletal pain was shaped by the interaction of bodily demand, professional responsibility, and organisational constraint. Therefore, work-related musculoskeletal pain in emergency nursing should be treated as a workforce and service-delivery concern, not only as an individual health problem.

Limits of Individual Coping

Nurses used several coping strategies to remain functional, including rest, painkillers, massage, stretching, posture modification, exercise, sleep, and mental endurance. Similar coping strategies have been reported in previous studies among nurses with musculoskeletal pain, nurses used pain relief medication, exercises, physiotherapy, dietary supplements, and rest to cope (41). These strategies show that nurses were not passive in relation to pain. They actively attempted to preserve bodily function and continue working. However, these findings show that coping was largely temporary, reactive, and constrained. Painkillers, massage, stretching, and short rest may reduce symptoms, but they do not remove the workplace conditions that repeatedly generate pain. Similarly, ergonomic awareness becomes difficult to apply when equipment is unsuitable, manpower is inadequate, the department is crowded, or clinical situation is urgent. The limitation of individual coping was most evident in the lack of sufficient rest and recovery time. Pain recurred because rest is interrupted by shift demands, workload, domestic responsibilities, and limited time for restorative practices. This may contribute to presenteeism, where nurses remain at work despite reduced capacity. In this study, nurses continued working by pausing, slowing down,

seeking help or relying on medication. Thus, pain may appear as reduced efficiency, stamina, and work performance rather than absenteeism alone, consistent with studies linking low back pain among nursing staff with presenteeism and reduced productivity (42,43). This finding challenges an individualised interpretation of resilience. Nurses' ability to cope should not be taken as evidence that the problem is adequately managed. In this context, coping allowed nurses to remain productive within conditions that continued to expose them to strain. Therefore, the key issue for nursing management is not only how nurses cope, but why nurses must continue coping with preventable or reducible pain in the first place.

Implications for Nursing Management and Occupational Health

The findings have important implications for nursing management and occupational health. Work-related musculoskeletal pain should be recognised as a workforce sustainability, patient safety, and occupational health concern. Protecting nurses' well-being is not separate from emergency service delivery. It is linked to staff well-being, work performance, retention, absenteeism, presenteeism and quality of care.

First, ergonomic risk reduction should be strengthened in ways that are realistic for emergency care. Education on body mechanics is useful, but insufficient if nurses do not have appropriate equipment, adjustable beds, lifting aids, adequate manpower, and enough space to practice safe handling. Hence, ergonomic interventions should include equipment availability, preventive maintenance, safe patient handling support, and workflow design.

Second, staffing and scheduling requires attention. Understaffing, double shifts, consecutive night duties, and limited recovery time increase physical strain and reduce opportunities for bodily recovery. Scheduling practices should consider adequate rest after night duty, fair workload distribution, and protected breaks during high demand shifts.

Third, managers should address the culture of silence around pain. Nurses need clear, accessible, and non-punitive pathways to report musculoskeletal pain early. Reporting should lead to visible action, such as

assessment, task adjustment, referral, physiotherapy, ergonomic review, or follow-up. If nurses believe that nothing can be done, pain will remain hidden and normalised.

Fourth, occupational health should be made more accessible. Early assessment, timely treatment, physiotherapy, and return-to-work support may help prevent episodic pain from becoming chronic. This is particularly important in emergency department, where nurses may continue working despite due to professional responsibility, workload pressure, and staffing constraints.

Overall, the findings suggest that meaningful prevention cannot rely on individual coping or advise practising ergonomic. A system-level response is required. This includes safe staffing, ergonomic resources, recovery-enabling schedules, responsive reporting systems, and accessible occupational health services. In conclusion, work-related musculoskeletal pain among emergency nurses should be treated as an organisational signal that working conditions require attention, not as an unavoidable part of nursing.

CONCLUSION

Work-related musculoskeletal pain among emergency nurses in Sarawak emerged as an embodied and ongoing occupational burden that disrupted movement, affected well-being and shaped work performance. It was often normalised within everyday nursing practice. The findings show that this pain was closely linked to the organisational realities of emergency care, including physically demanding tasks, workload pressure, understaffing, shift demands and limited recovery opportunities. Although nurses used various coping strategies to remain functional, these strategies were largely temporary and did not address structural conditions sustaining pain. Hence, work-related musculoskeletal pain should be recognised as a nursing management, occupational health and patient safety concern. Protecting nurses' musculoskeletal health is not peripheral to emergency service delivery, but fundamental to workforce sustainability, quality of care and patients' safety.

RECOMMENDATIONS AND LIMITATIONS

The findings also carry practical implications. Hospitals should strengthen ergonomic risk reduction in ways that are workable in real

emergency settings, not only in ideal training scenarios. Safe patient handling support, readily available equipment, adequate staffing, and more recovery-enabling scheduling are likely to be more meaningful than education alone. At the cultural level, managers should foster earlier reporting and reduce the normalisation of pain as a professional expectation. At the occupational health level, accessible pathways for assessment, treatment and follow-up may help prevent episodic pain from becoming chronic and silently endured.

Several limitations should be borne in mind when interpreting its findings. As a qualitative phenomenological study conducted in a single emergency department, the findings are not intended for statistical generalisation. An additional limitation is that cultural and religious beliefs were not explicitly explored. This may have reduced interpretive depth, as pain is shaped not only by physical experience but also by cultural meanings and spiritual coping, which may influence how it is perceived, expressed, and managed. The study also reflects self-reported accounts of pain and coping, which are shaped by memory, language, and personal meaning. However, the aim was not breadth but depth. Within that purpose, the study offers contextually rich insights into how emergency nurses in Sarawak live with and make sense of work-related musculoskeletal pain in daily practice.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this paper.

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AUTHOR CONTRIBUTIONS

NSB: Contributed to the study design, supervision, critical revision of the manuscript, and overall guidance of the research.

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