

Original Article

Perception and Practice Related to Postural Pain Among Breastfeeding Women in Hyderabad, Sindh

Shuaib Manzoor¹, Manoj Kumar², Marva Memon¹, Ume Rubab Ursani¹, Ahsan Memon³,
Tooba Shaikh¹, Kainat Batool Memon⁴

¹ Lecturer, Jeejal Maa Institute of Medical & Health Sciences, Hyderabad, Sindh, Pakistan

² Principal, Jeejal Maa Institute of Medical & Health Sciences, Hyderabad, Sindh, Pakistan

³ Physiotherapist, Indus Medical Hospital, Badin, Sindh, Pakistan

⁴ Clinical Physiotherapist, Pakistan

*Corresponding author: Shuaib Manzoor (PT), shuaibmanzoor55@gmail.com

“Cite this Article” | Received: 04 February 2026; Accepted: 23 May 2026; Published: 30 June 2026.

ABSTRACT

Background: Postural pain is a common but under-recognized concern among breastfeeding women because feeding often requires prolonged static posture, repetitive upper-limb loading, forward trunk or neck flexion, and inadequate ergonomic support. Limited professional guidance regarding breastfeeding posture may further increase maternal discomfort. **Objective:** To assess perception and practices related to postural pain among breastfeeding women in Hyderabad, Sindh. **Methods:** A hospital-based cross-sectional study was conducted over six months among 210 breastfeeding mothers aged 18–40 years and 6 weeks to 24 months postpartum. Participants were recruited through convenience sampling from four hospitals in Hyderabad, Sindh. Data were collected using a structured self-administered questionnaire assessing demographic characteristics, breastfeeding posture, pain/discomfort, coping responses, techniques used to reduce discomfort, and sources of advice. Pain severity was assessed using a 0–10 pain scale and categorized descriptively. Categorical variables were analyzed as frequencies and percentages. **Results:** Pain or discomfort during breastfeeding was reported by 177 participants (84.3%). Moderate pain was reported by 88 participants (41.9%), and severe pain by 61 participants (29.0%). Discomfort was most commonly experienced during the full feeding session (33.6%). Cradle hold was the most frequently reported breastfeeding position (43.1% of position responses), followed by cross-cradle hold (27.7%). Use of discomfort-reduction techniques was reported by 57.1% of participants, while family members were the most common source of advice (50.0% of advice responses). **Conclusion:** Breastfeeding-related postural pain was frequent and commonly moderate to severe among women in this sample. The findings highlight the need for structured postural education and physiotherapy-informed ergonomic guidance during antenatal and postnatal care. **Keywords:** Breastfeeding, Postural Pain, Musculoskeletal Discomfort, Breastfeeding Position, Postpartum Women.

EDITORIAL INFORMATION

Author Contributions: Concept: SM; Design: SM; Supervision: MK; Data Collection: UR; Methodology and Literature Review: AH; Formal Analysis and Original Draft: MM; Validation and Software: TS; Data Curation, Review, and Editing: KB and AAA.

Ethical Approval: University of Wolverhampton, Wolverhampton, United Kingdom

Informed Consent: Written informed consent was obtained from all participants

Conflict of Interest: The authors declare no conflict of interest; **Funding:** No external funding; **Data Availability:** Available from the corresponding author on reasonable request; **Acknowledgments:** N/A.

INTRODUCTION

Breastfeeding is a central component of infant nutrition and maternal–infant health, but it is also a repetitive physical activity that requires mothers to maintain sustained postures for prolonged periods. During the early postpartum period, mothers commonly breastfeed several times per day, often while sitting, bending the neck and trunk forward, supporting the infant’s weight with the upper limbs, or remaining in static positions for extended durations. These repeated postural demands may contribute to musculoskeletal discomfort, particularly in the neck, shoulders, upper back, lower back, arms, and wrists, especially when ergonomic support and postural guidance are inadequate (1). Postural pain among breastfeeding women therefore represents an important but often under-recognized maternal health

concern, with potential effects on maternal comfort, feeding continuity, daily functioning, and quality of life.

Postpartum women may be particularly vulnerable to posture-related musculoskeletal symptoms because of physiological, biomechanical, and functional changes occurring during and after pregnancy. Altered spinal alignment, abdominal muscle weakness, ligamentous laxity, hormonal influences, fatigue, sleep disruption, infant-care demands, and repetitive lifting or feeding activities can increase mechanical loading on the spine and surrounding soft tissues. Poor breastfeeding ergonomics, such as unsupported sitting, forward head posture, rounded shoulders, trunk flexion, inadequate arm support, and improper infant positioning, may further increase local muscle strain and discomfort during feeding. Common breastfeeding positions, including cradle hold, cross-cradle hold, side-lying, football hold, and laid-back positioning, may differ in their ergonomic demands depending on maternal posture, infant support, feeding duration, and use of pillows or back support (2–4).

Previous studies have reported that musculoskeletal pain is common among postpartum and lactating women, with breastfeeding posture, prolonged feeding duration, and limited postural support frequently identified as contributing factors (5–7). Neck and low back pain are among the most frequently reported musculoskeletal complaints in postpartum women, while discomfort during breastfeeding may also involve the shoulders, upper back, breast region, abdomen, elbows, wrists, and hands (8,9). Evidence also suggests that mothers often rely on informal advice from family members or personal experience rather than structured education from healthcare professionals, lactation consultants, midwives, nurses, or physiotherapists (10,11). This lack of professional guidance may limit awareness of optimal feeding posture, infant positioning, use of supportive aids, and simple preventive strategies such as back support, arm support, position variation, and post-feeding stretching.

Although international and regional studies have explored breastfeeding knowledge, breastfeeding practices, musculoskeletal discomfort, and breastfeeding positions, local evidence from Sindh remains limited regarding how breastfeeding women perceive postural pain and what practices they use to manage or prevent discomfort during feeding. In particular, there is insufficient hospital-based information from Hyderabad on the prevalence of breastfeeding-related discomfort, commonly adopted feeding positions, timing of discomfort, coping strategies, use of pain-relief or ergonomic techniques, and sources of advice regarding proper posture. Understanding these patterns is important for planning maternal education, antenatal and postnatal counseling, and physiotherapy-informed ergonomic guidance for breastfeeding mothers.

Therefore, the present study was conducted to assess perception and practices related to postural pain among breastfeeding women in Hyderabad, Sindh. Specifically, the study aimed to determine the frequency and severity of pain or discomfort during breastfeeding, identify commonly used breastfeeding positions, describe the timing and response to discomfort, assess the use of posture-related preventive or pain-relief techniques, and determine the main sources of advice received by breastfeeding mothers regarding proper posture.

MATERIALS AND METHODS

A hospital-based cross-sectional observational study was conducted among breastfeeding mothers in Hyderabad, Sindh, Pakistan. The study was carried out over a period of six months in four hospitals selected on the basis of accessibility and permission from the relevant authorities. The study population consisted of postpartum women who were currently breastfeeding at the time of data collection. A non-probability convenience sampling technique was used, and eligible participants were recruited after they were informed about the purpose of the study. Written informed consent was obtained before participation, and confidentiality and voluntary participation were maintained throughout the data collection process.

The sample size was calculated using the Raosoft sample size calculator, and a total of 210 breastfeeding mothers were included in the study. Women were eligible if they were aged 18 to 40 years, were between 6

weeks and 24 months postpartum, were currently breastfeeding, and had either the presence or absence of postural pain during or after breastfeeding. Women were excluded if they were younger than 18 years or older than 40 years, were less than 6 weeks or more than 24 months postpartum, were not currently breastfeeding, were practicing formula feeding only or exclusive pumping, or had pre-existing musculoskeletal disorders or chronic pain conditions that could independently influence pain reporting.

Data were collected using a structured self-administered questionnaire and a 0–10 pain intensity scale. The questionnaire was designed to assess demographic, obstetric, breastfeeding-related, and posture-related variables. The first section collected demographic and obstetric information, including age group, mode of delivery, and number of children. The second section assessed breastfeeding posture and related practices, including the presence of pain or discomfort during breastfeeding, timing of discomfort, breastfeeding positions used, response to discomfort, use of techniques to reduce or prevent discomfort, and sources of advice regarding breastfeeding posture. The third section assessed pain intensity using a 0–10 scale and classified pain severity into no pain, mild pain, moderate pain, and severe pain according to the recorded score categories used during data analysis (12,13).

The main outcome variable was breastfeeding-related postural pain or discomfort, recorded as the presence or absence of pain/discomfort during breastfeeding and categorized by severity. Additional variables included timing of discomfort, commonly used breastfeeding position, response to discomfort, use of postural or pain-relief techniques, source of advice, age group, mode of delivery, and number of children. Breastfeeding-related discomfort was operationally considered as self-reported pain, strain, or musculoskeletal discomfort experienced during or after breastfeeding. Postural practice was assessed through reported breastfeeding position, use of physical support such as pillows or cushions, adjustment of sitting or lying position, repositioning of the baby, rest, stretching, massage, consultation with a healthcare provider, and other self-reported coping strategies.

Completed questionnaires were reviewed for completeness before data entry. Data were entered and analyzed using SPSS. Categorical variables were summarized as frequencies and percentages. Descriptive analysis was used to report demographic characteristics, breastfeeding practices, pain/discomfort frequency, pain severity, discomfort timing, coping responses, techniques used to reduce discomfort, and sources of advice. Where relationships between categorical variables were assessed, the chi-square test of independence was considered appropriate for comparisons with adequate expected cell counts, while exact methods were considered where expected frequencies were small. Statistical findings were interpreted in accordance with the cross-sectional design, and causal conclusions were avoided because exposure and outcome were measured at the same time.

RESULTS

A total of 210 breastfeeding women were included in the analysis. Participant characteristics are presented in Table 1. Most participants were aged 18–29 years, while approximately one-third were aged 30–40 years. Cesarean section was slightly more frequent than normal vaginal delivery. Most women had one to four children.

Table 1. Demographic and Obstetric Characteristics of Participants

Variable	Category	n	%
Age group	18–29 years	143	68.1
	30–40 years	67	31.9
	Total	210	100.0
Mode of delivery	Normal vaginal delivery	99	47.1
	Cesarean section	111	52.9
	Total	210	100.0
Number of children	1–4	185	88.1
	5–8	23	11.0
	9–12	2	1.0
	Total	210	100.0

The study sample was predominantly composed of younger breastfeeding women, with 143 participants aged 18–29 years and 67 aged 30–40 years. Cesarean section was reported by 111 women, compared with

99 women who had normal vaginal delivery. Most participants had 1–4 children, indicating that the sample mainly represented women with lower parity.

Breastfeeding-related pain or discomfort was common among the participants, as shown in Table 2. Most women reported experiencing pain or discomfort during breastfeeding, while a smaller proportion reported no pain or discomfort.

Table 2. Pain or Discomfort During Breastfeeding

Variable	Category	n	%
Pain or discomfort during breastfeeding	Yes	177	84.3
	No	33	15.7
	Total	210	100.0

Pain or discomfort during breastfeeding was reported by 177 of 210 participants, representing more than four-fifths of the sample. Only 33 participants reported no breastfeeding-related pain or discomfort, indicating that musculoskeletal discomfort during breastfeeding was highly frequent in this hospital-based sample.

The timing of discomfort during breastfeeding is presented in Table 3. The most frequently reported timing was discomfort during the full feeding session, followed by discomfort after finishing breastfeeding and discomfort at the beginning of breastfeeding.

Table 3. Timing of Discomfort During Breastfeeding

Timing of Discomfort	n	%
At the beginning of breastfeeding	36	17.1
During the full feeding session	70	33.6
After finishing breastfeeding	40	19.0
Randomly or unpredictably	34	16.1
Not applicable	30	14.2
Total	210	100.0

Discomfort during the full feeding session was reported by 70 participants, making it the most common timing pattern. Discomfort after feeding was reported by 40 participants, while 36 experienced discomfort at the beginning of breastfeeding. Random or unpredictable discomfort was reported by 34 participants. These findings suggest that breastfeeding-related discomfort was not restricted to the start or end of feeding but was commonly sustained throughout the feeding episode.

Responses to breastfeeding-related discomfort are shown in Table 4. These data are presented as response-level findings because the total number of recorded responses exceeded the number of participants who reported pain or discomfort, indicating that some participants may have reported more than one response.

Table 4. Responses to Discomfort During Breastfeeding

Response to Discomfort	n	%
Changed sitting or lying position	53	28.2
Took a break from breastfeeding	41	21.8
Continued breastfeeding despite pain	36	19.1
Switched sides or repositioned the baby	49	26.1
Other	9	4.8
Total responses	188	100.0

Table 5. Breastfeeding Positions Reported by Participants

Breastfeeding Position	n	%
Cradle hold	112	43.1
Cross-cradle hold	72	27.7
Football hold	15	5.8
Side-lying	49	18.8
Laid-back	12	4.6
Total responses	260	100.0

Changing sitting or lying position was the most frequently reported response, accounting for 53 responses. Switching sides or repositioning the baby accounted for 49 responses, while 41 responses involved taking a break from breastfeeding. Continuing breastfeeding despite pain was reported in 36 responses. These

findings indicate that most reported responses involved either maternal repositioning or infant repositioning rather than formal pain-management strategies.

Breastfeeding positions used by participants are summarized in Table 5. The data are presented as response-level findings because the number of reported position responses exceeded the total sample size, suggesting that participants may have used more than one breastfeeding position.

Cradle hold was the most frequently reported breastfeeding position, accounting for 112 of 260 recorded position responses. Cross-cradle hold was the second most common position, followed by side-lying. Football hold and laid-back positioning were less frequently reported. Because the total number of position responses exceeded the sample size, these findings should be interpreted as reported position-use patterns rather than mutually exclusive participant categories. Use of techniques to reduce or prevent discomfort during breastfeeding is presented in Table 6. More than half of the participants reported using at least one technique, while a substantial proportion did not report using any technique.

Table 6. Use of Techniques to Reduce or Prevent Discomfort During Breastfeeding

Use of Techniques	n	%
Yes	120	57.1
No	90	42.9
Total	210	100.0

A total of 120 participants reported using techniques to reduce or prevent discomfort during breastfeeding, whereas 90 participants did not report using such techniques. Although technique use was reported by the majority, more than two-fifths of the sample did not use any discomfort-reduction technique, suggesting an important gap in postural self-management practices. Specific techniques used to reduce breastfeeding-related discomfort are shown in Table 7. These data are presented as response-level findings because the number of recorded technique responses exceeded the number of participants who reported using techniques.

Table 7. Techniques Used to Reduce Breastfeeding-Related Discomfort

Technique	n	%
Pillow or cushion for back/arm support	64	30.9
Chair with back support	12	5.8
Adjusting baby's position or latch	19	9.2
Light stretching or posture correction after feeding	3	1.4
Warm compress or massage	13	6.3
Resting after breastfeeding	19	9.2
Consultation with a healthcare provider	33	15.9
Other	44	21.3
Total responses	207	100.0

Use of a pillow or cushion for back or arm support was the most frequently reported technique, accounting for 64 responses. Consultation with a healthcare provider accounted for 33 responses, while adjusting the baby's position or latch and resting after breastfeeding each accounted for 19 responses. Light stretching or posture correction after feeding was reported least often, with only 3 responses, indicating limited use of active posture-correction strategies.

Table 8. Sources of Advice Regarding Breastfeeding Posture

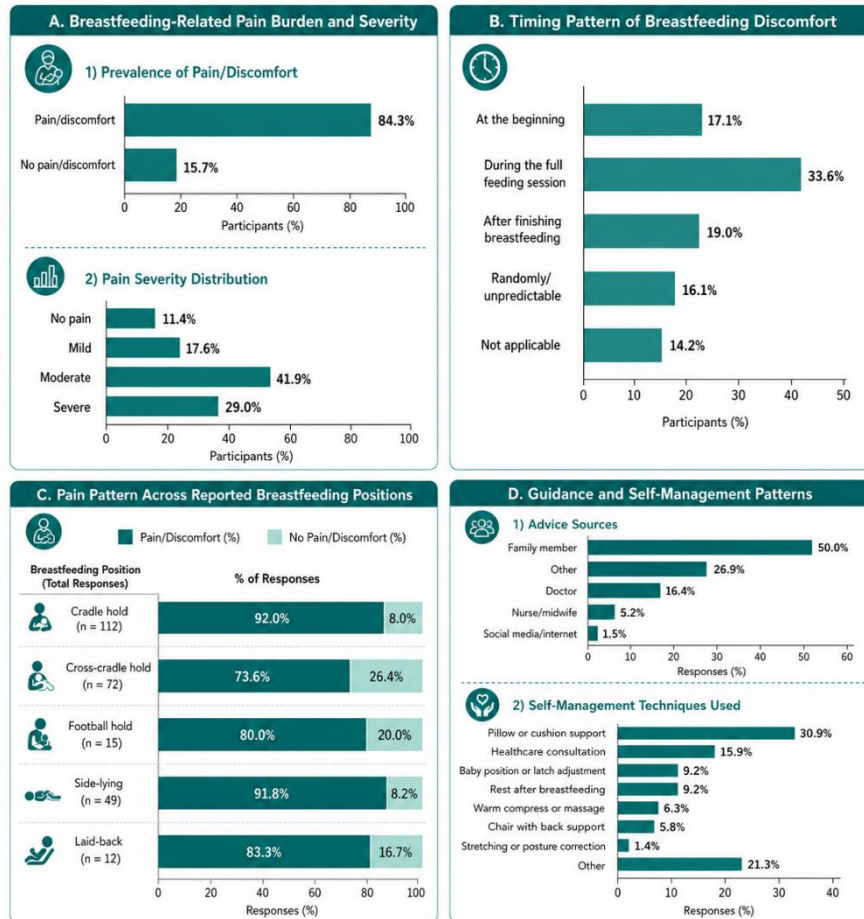
Source of Advice	n	%
Nurse or midwife	7	5.2
Doctor	22	16.4
Family member	67	50.0
Social media or internet	2	1.5
Other	36	26.9
Total responses	134	100.0

Family members were the most frequently reported source of advice, accounting for 67 of 134 recorded advice responses. Doctors accounted for 22 responses, while nurses or midwives accounted for only 7 responses. Social media or internet sources were rarely reported. These findings show that advice about breastfeeding posture was more commonly obtained from informal sources than from healthcare professionals.

Table 9. Pain Severity Among Breastfeeding Women

Pain Severity	n	%
No pain	24	11.4
Mild pain	37	17.6
Moderate pain	88	41.9
Severe pain	61	29.0
Total	210	100.0

Moderate pain was reported by 88 participants, while severe pain was reported by 61 participants. Together, moderate and severe pain accounted for 149 participants, representing 70.9% of the sample. Mild pain was reported by 37 participants, and 24 participants reported no pain.



Panel C and D use response-level denominators where multiple responses were possible; these values describe reported patterns rather than independent comparative risk estimates.

Figure 1 The multi-panel figure summarizes the clinical burden and practice pattern of breastfeeding-related postural pain among 210 breastfeeding women. Pain or discomfort was reported by 84.3% of participants, with moderate and severe pain accounting for 41.9% and 29.0%, respectively. Discomfort was most commonly sustained during the full feeding session, reported by 33.6% of participants. Response-level analysis showed that cradle hold and side-lying had high pain/discomfort proportions, 92.0% and 91.8%, respectively, while cross-cradle hold showed a lower pain/discomfort proportion of 73.6%; however, these position findings should be interpreted descriptively because multiple breastfeeding positions may have been reported by the same participant. Guidance and self-management patterns showed reliance on family advice, which accounted for 50.0% of advice responses, while nurse or midwife advice represented only 5.2%; among discomfort-reduction techniques, pillow or cushion support was most common at 30.9%, whereas active stretching or posture correction was rarely reported at 1.4%.

These findings indicate that breastfeeding-related pain was not only frequent but was commonly reported at moderate or severe intensity. Pain or discomfort according to reported breastfeeding position is shown in Table 10. These data are presented descriptively at the response level because position responses were not mutually exclusive.

Pain or discomfort was most frequently reported among responses involving cradle hold and side-lying positions, with pain/discomfort reported in 103 of 112 cradle-hold responses and 45 of 49 side-lying responses. Cross-cradle hold had a lower proportion of pain/discomfort responses compared with cradle

hold and side-lying. However, because participants may have reported more than one breastfeeding position, these findings should be interpreted as descriptive response-level patterns and not as independent comparative risk estimates.

Table 10. Pain or Discomfort by Reported Breastfeeding Position

Breastfeeding Position	Total Responses	Pain n	Pain/Discomfort %	No Pain/Discomfort n	No Discomfort %
Cradle hold	112	103	92.0	9	8.0
Cross-cradle hold	72	53	73.6	19	26.4
Football hold	15	12	80.0	3	20.0
Side-lying	49	45	91.8	4	8.2
Laid-back	12	10	83.3	2	16.7
Total responses	260	223	85.8	37	14.2

Overall, the results demonstrate a high burden of breastfeeding-related postural pain among the study participants. Pain or discomfort was reported by 84.3% of women, and 70.9% reported moderate to severe pain. Cradle hold and cross-cradle hold were the most frequently reported breastfeeding positions, while discomfort was most commonly experienced during the full feeding session. Most participants relied on position adjustment, infant repositioning, or physical support such as pillows and cushions to manage discomfort. Advice regarding breastfeeding posture was most commonly obtained from family members, whereas advice from nurses, midwives, and other healthcare professionals was comparatively limited.

DISCUSSION

The present hospital-based cross-sectional study assessed perception and practices related to postural pain among breastfeeding women in Hyderabad, Sindh. The findings showed a high burden of breastfeeding-related pain or discomfort, with 84.3% of participants reporting pain/discomfort during breastfeeding and 70.9% reporting moderate to severe pain. These findings indicate that postural pain during breastfeeding is a frequent maternal health concern in this sample and should not be regarded as a minor or incidental postpartum complaint. The high proportion of moderate and severe pain is particularly important because pain of this intensity may interfere with maternal comfort, feeding confidence, positioning tolerance, and continuation of breastfeeding practices.

The high prevalence of pain/discomfort observed in the present study is consistent with previous literature reporting musculoskeletal discomfort among lactating and postpartum women. Alazmi and Algabbani reported a high prevalence of musculoskeletal pain among lactating mothers and highlighted the relevance of breastfeeding position in maternal discomfort (1). Similarly, studies from Pakistan and other settings have described associations between breastfeeding positioning and musculoskeletal pain among postpartum mothers, particularly involving the neck, shoulders, upper back, and lower back (4,6,10). Although the present study was descriptive and did not establish independent risk estimates, its findings support the broader observation that breastfeeding can involve sustained biomechanical loading when performed with inadequate postural support.

In the present study, discomfort was most commonly reported during the full feeding session, followed by discomfort after finishing breastfeeding and discomfort at the beginning of feeding. This pattern suggests that sustained static posture and cumulative muscular loading during the feeding episode may contribute to maternal discomfort. Breastfeeding commonly requires repeated forward flexion of the cervical and thoracic spine, shoulder protraction, unsupported arm positioning, and prolonged sitting or side-lying postures. Biomechanical evidence has shown that different breastfeeding positions may impose different postural demands on the mother, and poor ergonomic alignment may increase strain on the spine and upper limbs (26). Therefore, discomfort during the full session may reflect the combined effect of feeding duration, limited postural variation, insufficient arm or back support, and fatigue.

Cradle hold and cross-cradle hold were the most frequently reported breastfeeding positions in this study, while football hold and laid-back positioning were less frequently reported. Descriptive response-level analysis showed high proportions of pain/discomfort responses for cradle hold and side-lying positions, although these findings should be interpreted cautiously because participants may have reported more than one breastfeeding position. Previous studies have also reported that commonly used breastfeeding

positions may be linked with maternal musculoskeletal discomfort when ergonomic support is inadequate (4,10,26). However, the present study cannot determine whether any specific breastfeeding position independently increased pain risk because the position data were not clearly mutually exclusive and no adjusted participant-level association analysis was available.

The management responses reported by participants were mainly practical and immediate, including changing sitting or lying position, switching sides or repositioning the baby, taking a break, or continuing breastfeeding despite pain. These responses suggest that mothers often attempt to self-adjust rather than use structured ergonomic or physiotherapy-guided strategies. More than half of the participants reported using some technique to reduce or prevent discomfort, but 42.9% did not report using such techniques. Among reported techniques, pillow or cushion support was the most common, whereas stretching or posture correction after feeding was rarely reported. This pattern indicates that passive support strategies were more common than active posture-correction or movement-based approaches. Prior research has emphasized that supportive aids such as breastfeeding pillows may help reduce discomfort by improving maternal and infant positioning (2), while physiotherapy-informed education may improve awareness of posture, positioning, and musculoskeletal prevention strategies (21).

A notable finding of the present study was the limited role of professional guidance in breastfeeding posture education. Family members were the most frequently reported source of advice, while doctors, nurses, and midwives accounted for a smaller proportion of advice responses. This reliance on informal guidance is important because family support may be valuable, but it may not consistently provide accurate ergonomic or musculoskeletal advice. Breastfeeding education studies have shown that professional counseling can improve breastfeeding knowledge, self-efficacy, and practice (17,21–23). In the context of postural pain, professional input from nurses, midwives, lactation consultants, and physiotherapists may be especially useful for teaching optimal infant alignment, maternal back support, arm support, safe position variation, latch-related positioning, and early management of neck, shoulder, and back symptoms.

The proportion of participants who had cesarean section was slightly higher than those who had normal vaginal delivery. Cesarean delivery may influence breastfeeding posture because postoperative pain, abdominal guarding, reduced mobility, and fear of pressure over the incision site may limit comfortable positioning. However, the present study did not compare pain outcomes by mode of delivery, and therefore no conclusion can be drawn regarding cesarean section as a determinant of postural pain in this sample. Future studies should examine delivery mode, postpartum duration, infant weight, feeding frequency, breastfeeding duration per session, physical activity, sleep quality, psychological stress, and pre-existing spinal symptoms as potential contributing factors.

The findings have practical implications for maternal health services. Antenatal and postnatal care programs should include brief but structured education on breastfeeding ergonomics, maternal posture, infant positioning, use of pillows or arm support, position variation, and warning signs requiring professional assessment. Since many mothers rely on family members for advice, education may also be extended to caregivers who assist postpartum women. Physiotherapists may contribute by developing simple posture-screening tools and home-based advice materials for breastfeeding mothers, especially those reporting moderate or severe discomfort.

This study has several limitations. Its cross-sectional design prevents causal interpretation between breastfeeding posture and pain. Convenience sampling and recruitment from selected hospitals in Hyderabad may limit generalizability to rural settings, community populations, or other regions of Pakistan. Pain and posture-related practices were self-reported, which may introduce recall bias, reporting bias, and subjective variation in pain perception. The study did not include clinical postural assessment, objective ergonomic evaluation, or physical examination of musculoskeletal impairments. Some variables, including breastfeeding position, response to discomfort, techniques used, and advice sources, appear to involve multiple responses, which limits participant-level inferential comparison. Important potential confounders, such as body mass index, postpartum duration, sleep quality, physical activity, psychological

stress, infant age and weight, feeding frequency, and prior musculoskeletal history, were not systematically analyzed. Despite these limitations, the study provides useful local descriptive evidence regarding the burden of breastfeeding-related postural pain and highlights the need for better professional guidance and postpartum ergonomic education.

CONCLUSION

This study concludes that postural pain is common among breastfeeding women in Hyderabad, Sindh, with most participants reporting pain or discomfort during breastfeeding and a substantial proportion experiencing moderate to severe pain. Discomfort was most frequently reported during the full feeding session, and cradle hold, cross-cradle hold, and side-lying were commonly reported breastfeeding positions. Many mothers used practical self-adjustment strategies such as changing position, repositioning the baby, or using pillows and cushions; however, structured posture-correction practices were uncommon, and advice was more frequently obtained from family members than healthcare professionals. These findings highlight the need to integrate breastfeeding ergonomics, postural education, and physiotherapy-informed guidance into antenatal and postnatal maternal care to improve maternal comfort and reduce breastfeeding-related musculoskeletal discomfort.

REFERENCES

1. Alazmi AA, Algabbani MF. Musculoskeletal pain prevalence and association with breastfeeding position in lactating mothers in Riyadh, Saudi Arabia: a cross-sectional study. *Clin Exp Obstet Gynecol*. 2023 Nov 28;50(11):250.
2. Widiastuti IA, Rustina Y, Efendi D. The use of breastfeeding pillow to reduce discomfort for breastfeeding mothers. *Pediatr Rep*. 2020 Jun 25;12(Suppl 1):8702.
3. Womsi RT, Ghassi HT, Kenmogne AF, Kendjoua JA, Buh FC, Douryang M, et al. Postpartum stress and the occurrence of breastfeeding-related spine musculoskeletal disorders among lactating mothers in the Dschang Health District, Cameroon. *Cureus*. 2025 Mar 15;17(3).
4. Rani S, Habiba UE, Qazi WA, Tassadaq N. Association of breast feeding positioning with musculoskeletal pain in post partum mothers of Rawalpindi and Islamabad. *J Pak Med Assoc*. 2019 Apr 1;69(4):564-6.
5. Santhosh BM, Malavika MD. Exploration into the ergonomics of sitting posture of lactating mothers.
6. Irfan A, Rana UI, Hussain IT, Saeed U, Tahir H, Ahmad MT. Frequency of musculoskeletal discomforts and its association with various breastfeeding positions among nursing mothers. *MedERA J CMH LMC IOD*. 2023;5(2).
7. Chungade NS, Mahishale A, Dalal A, Angolkar M. Musculoskeletal pain syndrome in postpartum women. *Nepal J Obstet Gynaecol*. 2020 Nov 15;15(2).
8. Sultania P, Agrawal NR, Rani A, Dharel D, Charles R, Dudani R. Breastfeeding knowledge and behavior among women visiting a tertiary care center in India: a cross-sectional survey. *Ann Glob Health*. 2019 May 3;85(1):64.
9. Mehra P, Verma N, Kaul G, Kumar A. Association of breastfeeding related musculoskeletal pain, sleep quality and physical activity among postpartum women: a literature review.
10. Dandekar SA, Khatavkar M. Impact of breastfeeding positions on neck pain in postpartum mothers. *Int J Community Med Public Health*. 2022 Oct;9(10):3791-6.
11. George SA, Abraham AT, Kumar A. A case study on risk of musculoskeletal disorder due to poor ergonomics in first time lactating mother with recurrent myofascial trigger. *Int J Health Sci Pharm*. 2022 Mar 10;6(1):2581-6411.

12. Jones LE, Amir LH, Shi En Chew N, Yun Low S, Yu Ting Woo V, Fok D, et al. Do lactating mothers' descriptions of breastfeeding pain align with a biopsychosocial pain reasoning tool? A qualitative study. *Brain Sci.* 2025 Oct 8;15(10):1087.
13. Prakash V, Sheela SR, Raj K, Satyanarayana PT. Perception and satisfaction regarding breast feeding among breast feeding mothers: a hospital based study.
14. Asif A, Amjad F, Dastgir H, Asif W, Adil A, Afzal M. Prevalence of neck and low back pain in women during post-partum period. *Healer J Physiother Rehabil Sci.* 2022;2(4):271-8.
15. Abargil M, Irani M, Klein Selle N, Atzil S. Breastfeeding at any cost? Adverse effects of breastfeeding pain on mother–infant behavior. *Biology.* 2023 Apr 22;12(5):636.
16. Almutairi SM, Aljutaily RS, Alshuwayman RS, Almutairi M, Alshehre YM. Breastfeeding education and the role of physical therapy: a cross-sectional survey. *Int J Womens Health Reprod Sci.* 2023 Oct 1;11(4).
17. Devi YR, Randhawa RK, Chaudhary P. Knowledge and practice regarding breastfeeding among primipara mothers of obstetrics ward, Birganj, Nepal. *Int J Health Sci Res.* 2022;12(1):57-60.
18. Aktürk NB, Kolcu M. The effect of postnatal breastfeeding education given to women on breastfeeding self-efficacy and breastfeeding success. *Rev Assoc Med Bras.* 2023 Aug 21;69(8):e20230217.
19. Tariq K, Shaikh BT, Azam N, Pervaiz F, Kawish AB, Javaid N, et al. Knowledge and perceptions of expecting and lactating women about exclusive breastfeeding attending Ayub Teaching Hospital, Abbottabad. *Pak Armed Forces Med J.* 2019 Apr 30;S223.
20. Ezeukwu OA, Ojukwu CP, Okemuo AJ, Anih CF, Ikele IT, Chukwu SC. Biomechanical analysis of the three recommended breastfeeding positions. *Work.* 2020 Jun 4;66(1):183-91.
21. Kamal NN, Ismael FH, Abdelrehim MG, El-Khateeb AS. Breastfeeding practice and perception among women attending primary health care center in Giza, Egypt. *Minia J Med Res.* 2021 Jul 1;32(3):29-39.
22. Ndikom CM, Ologunye BF. Breastfeeding education and exclusive breastfeeding practices among mothers in Ibadan, Oyo State, Nigeria. *Ethnicity.* 2020;31(48):32-0.
23. Samuel OA, Oluwaseun OO. Knowledge, attitude and practice of exclusive breastfeeding among nursing mother in Saki West Local Government. *J Comm Pub Health Nurs.* 2020 Nov 17;6:257.
24. Elamin MO, Khan W. Role of knowledge, perception, attitudes and practices of female medical students towards breastfeeding. *Int J Multiphys.* 2024 Jul 1;18(3).
25. Graven-Nielsen T. Mechanisms and manifestations in musculoskeletal pain: from experimental to clinical pain settings. *Pain.* 2022 Nov 1;163(S1):S29-45.
26. Piscopo D, inventor. Breastfeeding positioning method and device. United States patent US 6,502,262. 2003 Jan 7.
27. Huskisson EC. Measurement of pain. *Lancet.* 1974 Nov 9;304(7889):1127-31.
28. Hawker GA, Mian S, Kendzerska T, French M. Measures of adult pain: Visual Analog Scale for pain, Numeric Rating Scale for pain, McGill Pain Questionnaire, Short-Form McGill Pain Questionnaire, Chronic Pain Grade Scale, Short Form-36 Bodily Pain Scale, and Measure of Intermittent and Constant Osteoarthritis Pain. *Arthritis Care Res.* 2011;63(S11):S240-52.