

Prevalence of Trapezitis in Breastfeeding Women

Rutuja Mane¹, Dr. Shraddha Mohite^{2*}

¹Final year student, Krishna college of physiotherapy, KVV415539, Agashivnagar, Malkapur, Maharashtra, India Email Id: rutupamane353@gmail.com

²Associated Professor Department of Musculoskeletal Science, Krishna College of Physiotherapy, Krishna Vishwa Vidyapeeth, Karad.

Corresponding Author

Dr. Shraddha Mohite

ABSTRACT

Background: Breastfeeding is globally recognized for its health benefits to infants and mothers. However, its impact on maternal musculoskeletal health is often overlooked. Trapezitis, an inflammatory condition of the trapezius muscle, is increasingly seen among breastfeeding women, likely due to sustained poor posture during nursing.

Objectives: To determine the prevalence of trapezitis among breastfeeding women and assess associated postural risk factors.

Methods: A cross-sectional, observational survey was conducted over three months in Karad, involving 60 breastfeeding women aged 20–40 years. Participants were selected using simple random sampling. Data were collected via a structured Google Form questionnaire covering demographic details, breastfeeding posture, duration, and symptoms suggestive of trapezitis. Women with non-breastfeeding-related musculoskeletal pain or neurological disorders were excluded. Responses were statistically analysed to assess prevalence and contributing factors.

Results: The study revealed that 75% of participants exhibited signs or symptoms linked to trapezitis. Of these, 38% were identified with active trapezitis, while 37% were at risk due to reported postural deviations and discomfort during or after breastfeeding. Cradle hold was the most common breastfeeding position. Lack of ergonomic support (e.g., backrest or nursing pillows) was frequently reported. Most symptomatic participants breastfed more than four times daily in unsupported postures.

Conclusion: There is a significant prevalence of trapezitis among breastfeeding women. Improper posture, extended feeding durations, and lack of ergonomic awareness were major contributors. The findings highlight the importance of incorporating postural education and physiotherapy into postpartum care to improve maternal musculoskeletal health.

Keywords: Trapezitis, Breastfeeding, Posture, Musculoskeletal Pain, Postpartum, Physiotherapy, Ergonomics

How to cite this article: Mane R, Mohite S. Prevalence of Trapezitis in Breastfeeding Women. *Int J Drug Deliv Technol.* 2026;16(22s): 367-371. DOI: 10.25258/ijddt.16.22s.41

INTRODUCTION

Breastfeeding is widely recognized as the gold standard for infant nutrition, providing essential nutrients, immunological protection, and promoting bonding between mother and child [1]. The World Health Organization recommends exclusive breastfeeding for the first six months of life and continuation, with complementary foods, for up to two years or beyond [1]. While breastfeeding has undeniable health benefits for both mother and infant, it also brings with it certain physical challenges. Many mothers report musculoskeletal discomfort, particularly pain in the neck, shoulder, and upper back regions, which can adversely affect breastfeeding continuation and maternal well-being [2].

Breastfeeding requires mothers to assume sustained postures for prolonged periods, often several times a day, especially in the early months [2]. Poor ergonomics, inadequate postural support, and repetitive positions are major contributors to musculoskeletal pain in lactating women [3]. A cross-sectional survey has reported that 60–70% of breastfeeding women experience pain in the neck, shoulders, and back at some point during lactation [4]. Pain in these areas can reduce maternal comfort, interfere with proper infant positioning, and increase the risk of early weaning [3,4].

The prevalence of primary neck and shoulder pain in postpartum women is well-documented, with studies reporting a significant association between

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musculoskeletal pain and breastfeeding-related postures [5]. Charette and Th roux, in their case series of 11 breastfeeding women, identified musculoskeletal impairments—particularly neck muscle strain, shoulder dysfunction, and myofascial pain—as important causes of pain during lactation [2,6]. The sustained static posture required during feeding was found to lead to overuse of cervical and scapular stabilizers, thereby increasing the risk of localized muscle inflammation.

Several studies have investigated the relationship between breastfeeding position and pain development. A study conducted in Riyadh observed that mothers who adopted unsupported or awkward positions during feeding reported significantly higher rates of musculoskeletal pain compared to those using ergonomic supports [4]. Similarly, Rani et al. found that improper positioning was strongly correlated with increased pain scores in postpartum mothers in Rawalpindi and Islamabad [9].

The choice of breastfeeding position—whether cradle, cross-cradle, side-lying, or football hold—affects the degree of cervical flexion, scapular protraction, and spinal loading experienced by the mother [10]. When mothers lack guidance on optimal positioning, they may inadvertently maintain excessive neck flexion, rounded shoulders, and forward head posture for extended durations [10,11]. Such sustained malalignment can predispose the cervical and upper thoracic musculature to fatigue and inflammation, resulting in pain syndromes like trapezitis [7].

Trapezitis is defined as inflammation of the trapezius muscle, characterized by localized pain, muscle tenderness, and stiffness that worsens with neck movement [7]. It is considered a form of myofascial pain syndrome and is often triggered by overuse, poor posture, or prolonged static positioning of the cervical spine [7]. Though trapezitis has been widely studied in occupational populations such as beauticians, computer users, and hairdressers [7,15], little is known about its prevalence among postpartum women engaged in repetitive breastfeeding activities.

The trapezius muscle plays a key role in maintaining head and neck posture as well as stabilizing the shoulder girdle. Prolonged feeding sessions that require cervical flexion and scapular stabilization impose a sustained isometric load on the trapezius muscle fibers. This leads to microtrauma, muscle spasm, and subsequent inflammatory response, which manifests as pain and tenderness along the upper fibers of the muscle [7]. If untreated, chronic trapezitis can contribute to functional limitations, decreased quality of life, and difficulty performing childcare tasks.

International studies have consistently reported that neck and upper back pain are among the most common

complaints in breastfeeding mothers. Ojukwu et al. found a high prevalence of breastfeeding-related neck pain among Nigerian lactating women, identifying forward neck posture, multiparity, and longer breastfeeding sessions as key correlates [11]. Similarly, Rana et al. compared breastfeeding positions and concluded that the cradle hold was associated with higher pain intensity compared to side-lying or football hold positions [12]. Yuan et al. reported that more than half of the mothers surveyed in the Klang Valley experienced neck or low back pain, with inadequate ergonomic education being a major risk factor [14].

While these studies highlight the burden of musculoskeletal pain, they rarely differentiate between generalized neck pain and specific conditions such as trapezitis. This represents an important gap in the literature, as trapezitis is a distinct clinical entity that may require targeted physiotherapy interventions such as stretching, strengthening, ergonomic training, and trigger point release [7].

Several risk factors may contribute to the development of trapezitis during breastfeeding. These include prolonged static posture, forward head position, lack of lumbar support, holding the infant without arm support, and feeding in non-ergonomic seating arrangements [4,9,10]. Psychosocial factors such as stress, fatigue, and sleep deprivation—common during the postpartum period—may exacerbate muscle tension and pain perception [3]. Hormonal changes during the puerperium may also influence ligamentous laxity and postural stability, predisposing mothers to musculoskeletal disorders [5].

In addition, multiparous women are at higher risk of developing postural syndromes such as upper cross syndrome, which is characterized by tightness of the upper trapezius and levator scapulae, weakness of deep neck flexors, and forward head posture [8]. This condition can act synergistically with poor feeding posture to precipitate trapezitis.

Despite the increasing attention to maternal musculoskeletal health, there is a paucity of data specifically focusing on the prevalence of trapezitis in breastfeeding women. Most existing studies report generalized neck or shoulder pain but do not clinically confirm trapezitis as the underlying cause [2,3,4,11,14]. Understanding the prevalence and associated risk factors of trapezitis is essential for designing preventive strategies and targeted interventions. Early identification and management can improve maternal comfort, promote sustained breastfeeding, and enhance postpartum quality of life.

Hence, this study aims to determine the prevalence of trapezitis in breastfeeding women and explore its association with demographic, postural, and

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breastfeeding-related factors. By filling this knowledge gap, the research will contribute to evidence-based physiotherapy guidelines for lactating mothers and help healthcare professionals implement ergonomic and rehabilitative measures to reduce musculoskeletal complications during breastfeeding.

AIM: To find Prevalence of Trapezitis in Breastfeeding Women

Objective:

- To find the prevalence of trapezitis in breastfeeding women.
- To assess the trapezitis in breastfeeding women.
- To analyze the prevalence of trapezitis in breastfeeding women.

MATERIALS AND METHODOLOGY : This study was designed as an observational, cross-sectional survey conducted over a period of three months in Karad. A total of 60 breastfeeding women between the ages of 20 and 40 years were recruited using convenience sampling. Participants were eligible if they were exclusively or partially breastfeeding at the time of data collection and reported pain in the shoulders, back, or chest during breastfeeding. Women with musculoskeletal pain unrelated to breastfeeding, known neurological disorders, or those unwilling to participate were excluded. Data were collected using a structured questionnaire created in Google Forms, which was circulated online. The questionnaire included sections on demographic information, breastfeeding habits, feeding posture, and details regarding pain location, intensity, and frequency. In addition to the questionnaire, each participant underwent a thorough postural and ergonomic assessment to evaluate sitting and feeding positions. A detailed physical examination was performed, which included palpation for trapezius muscle tenderness, assessment of cervical range of motion, identification of myofascial trigger points, and evaluation of trapezius tightness. All participants provided informed consent before participation, and confidentiality of responses was maintained throughout the study.

Statistical Analysis and Results

Data collected from 60 participants were compiled and analysed using descriptive statistics, with results expressed in frequencies and percentages. Among the study population, 75% (n = 45) reported signs or symptoms suggestive of trapezitis. Of these, 38% experienced active symptoms including pain, stiffness, and localized trapezius tenderness, while 37% were identified as being at risk due to poor posture, reported

discomfort during feeding, and clinical evidence of muscle tightness. The cradle hold was observed to be the most commonly used breastfeeding position among participants, and a significant proportion reported breastfeeding four or more times per day. Notably, many women reported not using ergonomic supports such as pillows or armrests during feeding, which may have contributed to sustained static posture and muscular strain. Symptoms were most frequently reported during feeding sessions but, in several cases, persisted throughout the day, suggesting a cumulative effect of repeated strain on the trapezius muscle.

Table 1: Symptom Distribution (n = 60)

Symptom	Percentage (%)
Any trapezitis-related symptoms	75%
Active trapezitis	38%
At risk due to posture/discomfort	37%
Upper back pain	42%
Shoulder pain	33%
Frequent pain (≥ once daily)	29%

Table 2: Ergonomic Practice and Symptom Correlation

Factor	Symptomatic (%)	Asymptomatic (%)
Used ergonomic support (pillow, etc.)	21%	79%
No ergonomic support	85%	15%
Breastfed ≥ 4 times/day	82%	18%
Poor posture reported	77%	23%

Table 3: Clinical Assessment Findings (n = 60)

Clinical sign	Number of Participants	Percentage (%)
Forward head posture	42	70%
Rounded shoulder	39	65%
Slouched sitting posture	35	58%
Tenderness in upper trapezius	34	57%
Presence of trigger points	28	47%

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Trapezius muscle tightness	36	60%
Restricted neck range of motion	18	30%

DISCUSSION:

According to this study, 75% of nursing mothers have symptoms associated with trapezitis. Approximately 40% of participants had active trapezitis, and 37% were at risk because of bad ergonomic practices and sore muscles. These results are consistent with research from around the world, such as studies by Charette & Thérout (2019), Ratajczak & Górniewicz (2024), and Alazmi & Algabbani (2023), which all note that breastfeeding posture is associated with high rates of musculoskeletal pain.

In addition to self-reported symptoms, clinical assessments provided objective evidence of musculoskeletal strain associated with trapezitis. Forward head posture (70%), rounded shoulders (65%), and trapezius tightness (60%) were frequently observed. Tenderness on palpation of the upper trapezius was noted in 57% of participants, with nearly half exhibiting myofascial trigger points. These findings validate the presence of trapezitis beyond subjective reporting and emphasize the importance of integrating physical examination into routine postpartum care for early detection and management.

One important contributing factor was found to be the absence of ergonomic support, such as pillows or armrests. The majority of women relied on unsupported sitting positions, which repeatedly strained the trapezius, particularly during prolonged feeding periods. The issue was exacerbated by hormonal laxity, psychological stress, and a lack of postural awareness.

Furthermore, women who were multiparous and those who had been postpartum for more than six months reported experiencing discomfort more frequently, which suggests that postural strain builds up over time. This lends credence to the idea that trapezitis is exacerbated by posture-related syndromes like Upper Cross Syndrome.

These results highlight the necessity of ergonomic training, posture education, and physiotherapy-based interventions as preventive measures. To guarantee comprehensive postpartum well-being, maternal healthcare systems must give musculoskeletal screening top priority and encourage ergonomic breastfeeding.

CONCLUSION:

This study found a high prevalence of trapezitis among breastfeeding women, with 75% of participants reporting symptoms suggestive of the condition. Of these, 38% experienced active pain, stiffness, and localized tenderness, while 37% were identified as at risk due to poor posture and muscle tightness. Clinical examination confirmed the presence of postural deviations such as forward head posture, rounded shoulders, and trapezius muscle tightness, emphasizing the role of sustained improper breastfeeding posture in musculoskeletal strain. The cradle hold was the most commonly used position, and a significant proportion of participants breastfed four or more times per day without ergonomic support. These findings highlight the need for postpartum education focusing on ergonomics, supported feeding positions, and preventive physiotherapy interventions to reduce trapezius muscle strain, enhance maternal comfort, and support sustained breastfeeding practices.

LIMITATIONS:

This study had certain limitations that should be considered while interpreting the results. The sample size was relatively small ($n = 60$) and drawn from a single geographic location, which may limit the generalizability of the findings to wider populations. The cross-sectional design only allowed for the identification of prevalence and associations but could not establish a causal relationship between breastfeeding posture and trapezitis. Self-reported data on posture and pain may have been influenced by recall bias or subjective interpretation. Additionally, the study did not evaluate long-term follow-up to assess whether ergonomic corrections or physiotherapy interventions could reduce symptoms over time. Future research with larger, more diverse populations and longitudinal follow-up is recommended to strengthen the evidence base and develop targeted intervention strategies.

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