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Original Research

Breastfeeding Positioning with Musculoskeletal Pain: A descriptive study among postnatal mother in selected hospital Gurugram, Haryana

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ABSTRACT:

Background: The World Health Organisation states that breastfeeding should be the exclusive source of sustenance for infants for the first six months following delivery. Mothers are reportedly breastfeeding less and less frequently worldwide, despite the advantages breastfeeding has to provide both the mother and the kid (Engebretsen et al., 2007). Pain during lactation (Hawley et al., 2015) might have musculoskeletal origins (Kam, 2016; Charette and Theroux, 2019; Rani et al., 2019; Afshariani et al., 2019). This is one of the reasons linked to low rates and early discontinuation of nursing. Objective: To find the association of breastfeeding positioning with musculoskeletal pain among postnatal mothers. Material and Method: Quantitative Research Approach with Descriptive Research Design was used, data was collected from selected hospital through consecutive sampling by interview method. The postnatal mother was assessed byNordic Musculoskeletal pain scale. Result: In total, 150 postnatal mother majority of mother were age grouped from 20-30 years. The majority of the participants had 1 breastfeeding child N=103 (68.7%), postpartum duration 1-6 months N=97 (64.7%), with the frequency of breastfeeding 1-3 sessions/day N = 91(60.7%) respectively. Most nursing mothers had a caesarean section as their mode of delivery N=47 (31.3%) and football hold were the most common breastfeeding position N=74 (49,3%) causing musculoskeletal discomfort of participants. Chi-square showed a significant association for ache/pain and discomfort in the regions of neck, elbows, lower backs as (p=0.00) at significance level 0.05. respectively. Conclusion: The Musculoskeletal discomforts were more pronounced in regions of the neck, shoulders, elbows, and w upper/lower back with the breastfeeding positions among nursing mothers.

Keywords: breastfeeding positioning, Musculoskeletal pain, Postnatal Mother

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INTRODUCTION

Pain that affects the muscles, bones, ligaments, tendons, and nerves is referred to as musculoskeletal pain (MSP) [2]. It may manifest at one location, as in the case of shoulder, lower back, or neck discomfort, or it may spread to multiple locations [3]. Postural tension, repetitive motions, overuse, and extended immobilisation are among the common causes of MSP [4].

Musculoskeletal disorders can arise from a variety of causes after childbirth, including hormonal and physiological changes that occur during pregnancy, postpartum depression, and changes in postural habits after childbirth [2, ,5,6]. One of the difficulties faced by nursing mothers (i.e., mothers who breastfeed) is the result of extended sitting and non-ergonomic breastfeeding positions [4, 7, 8, 9]. The cradle position, which involves placing the baby on the mother's arm on the same side as the nursing breast to hold the baby's head and body, the cross-cradle position, which involves placing the baby on the mother's arm opposite the nursing breast to hold the baby's head and body, the side-lying position, which involves the mother and baby lying belly-to-belly on their sides, the football hold, also referred to as the underarm position, in which the mother sits with the baby resting along her forearm, the baby's body tucked alongside her side and his feet facing the back of the chair, and the laid-back position, which involves the mother reclined with the baby's body across her chest, are some of the common breastfeeding positions [8, 10 11, 12].

Persistent breast or nipple pain associated with breastfeeding is common. In one study, as many as 29.3% of mothers who stopped breastfeeding during the first month postpartum reported pain. In another study, 20% of breastfeeding mothers still had nipple pain after 8 weeks postpartum. Pain associated with breastfeeding is a common reason cited by mothers who did not reach their breastfeeding goals.

From previous studies, BF-related musculoskeletal problems have been commonly associated with the adoption of awkward postures during feeding sessions. From anecdotal observations, one of the most common awkward positions adopted by nursing mothers is unsupported head/neck posture with resultant sustained neck flexion in an attempt to monitor the infant during feeding. Such a sustained awkward position with excessive repetition usually puts stress on the neck and back muscles. BF-related neck pain (BFRNP) has been reported among nursing mothers, particularly those who adopt unsuitable BF postures.

AIMS AND OBJECTIVES

The aim and objective of the study were to assess the association of breastfeeding positioning with musculoskeletal pain among postnatal mothers.

MATERIAL AND METHODS

The study was conducted in a selected hospital of Gurugram. 150 sample was selected usingconsecutive sampling. The Quantitative Research Approach with Descriptive ResearchDesign which aimed to assist the association of breastfeeding positioning with musculoskeletal pain among postnatal mothers. Interview method was taken into consideration forcollecting data from the postnatal mother. The standardizedNordic Musculoskeletal pain scale was used to collect the data. The test-retest reliability was 0.9. After explaining the purpose of the study, written informed consent from postnatal mother was obtained.

RESULT

Both descriptive and inferential statistics were used. The analysis of the data was done on the bjectives of the study.Section 1 of the study deals with description of sociodemographiccharacteristics of postnatal mother. The above table no,1 depict that most of the postnatal mothers 103(68.2%) were between 20-30 years of the age group, half of the patient 71(47.3%) were illiterate,), most of the caregiver occupation status is 73(48.7%) were between private job with monthly income 72(48.0%) between 5001-10000, postnatal mothers with gestational age 37-42 weeks are 68(45.3%), in which most of primipara caesarean mothers 103(68.2%) with section 47(31.1%) and the type of family 95(63.6%) were joint with religion 88(58.7%) were Hindu and the residence was urban 96(64.0%), positioning in breastfeeding 74(49.3) were in football position, no. of breastfeed children 103(97%) were mostly 1 with breastfeeding span 97(60.7%) was up to 6 months and having breastfeeding sessions 91(60.7%) with 4-6.

Table No. 1 frequency and percentage distribution of postnatal mothers' socio-demographic characteristics N=150

S.NO	Scio-demograp	hic variable (patient)	Frequency	Percentage	
1.	Age	20-30	103	68.2	
		31-40	45	29.8	
		41-45	2	1.3	
2.	Education	Illiterate	32	21.3	
		Primary	71	47.3	
		Secondary	28	18.7	
		Graduate/postgraduate	19	12.7	
3.	Occupational status	Private job	73	48.7	
		Government job	48	32.0	
		Self-employee	29	19.3	
4.	Monthly income	Less than 5000	51	34.0	
		5001-10000	72	48.0	
		More than 10000	27	18.0	
5.	Gestational age	Less than 37 weeks	75	50.0	
		37-42 weeks	68	45.3	
		More than 42 weeks	7	4.7	
6.	Number of para	Primipara	103	68.2	
		Multipara	47	31.4	
7.		NVD without episiotomy	46	30.7	

	Mode of delivery	NVD with episiotomy 13		28.7
		Instrumental delivery	14	9.3
		Caesarean section	47	31.3
8.	Type of family	Nuclear family	55	36.4
		Joint family	95	63.6
9.	Religion	Hindu	88	58.7
		Muslim	28	18.7
		Sikh	19	12.7
		Christian	15	10.0
10.	Residence	Urban	96	64.0
		Semi urban	42	28.0
		Rural	12	8.0
11.	Positioning in	Football position 74		49.3
	breastfeeding	Cross cradle position	39	26.0
		Cradle	11	7.3
		Side lying	18	12.0
		Laid back	8	5.3
12.	No. of breastfeed	1	103	68.7
	children	2-4	47	31.3
		More than or equal to 5	0	
13.	Breastfeeding span	0-6 months	97	64.7
		6 months -1 year	53	35.3
		More than 1 year	0	
14.	Breastfeeding	4-6 91		60.7
	sessions	7-9	57	38.0
		10-12	2	1.3

Table No 2: association of breastfeeding positioning with musculosk eletal pain among postnatal mothers $N\!=\!150$

S.no	Ache, pain, discomfort	Breastfeeding positioning				P. value	
	in last 12 months						
		Football	Cross-cradle	cradle	Side-lying	Laid back	
1.	Neck	F	f	f	f	f	.001
	Yes	59	17	4	11	2	
	No	15	22	7	7	6	
2.	Shoulder						.166
	Yes	71	39	10	18	6	
	No	3	0	1	0	2	
3.	Elbow						.001
	Yes	33	33	8	16	5	
	No	41	4	3	2	3	
4.	Wrist/Hand						.007
	Yes	16	25	6	10	3	
	No	58	14	5	8	5	
5.	Upper back						.278
	Yes	12	4	2	2	0	
	No	62	35	9	16	8	
6.	Lower back						.000
	Yes	21	22	8	14	7	
	No	53	17	3	4	1	
7.	Knees						.486
	Yes	27	11	2	10	3	
	No	47	28	9	8	5]

Note: significant at p<0.05

The above table No.2 shows that there were no association found between breastfeeding position with musculoskeletal pain in postnatal mother with except neck, elbow, lower back.

DISCUSSION

The finding of the study had been discussed as per the objective of the present study with thereference other studies conducted in the same area.

The result of present study shows thatthere were no association found between breastfeeding position with musculoskeletal pain in postnatal mother with except neck, elbow, lower back. Abeer A. Alazmi, Maha F. Algabbani (2023) conducted a cross-sectional study to assess Musculoskeletal Pain Prevalence and Association with Breastfeeding Position in Lactating Mothers in Riyadh, Saudi Arabi. 336 women aged 20-50 years participated in this study (58.3% reported vaginal delivery, 74.1% had one to four children, 61.3% had a bachelor's degree or higher, and 45.5% worked). Only 25% of the mothers were given health education regarding MSP. 97.3% of mothers reported pain on at least one part of their body. There were differences in pain intensity ratings across different locations (with a median and interquartile range in parentheses): lower backs at 0(0, 6) and upper backs at 2 (0, 5), necks at 3 (0, 6), shoulders at 3 (0, 5) and arms at 2(0, 4), and hands at 1(0, 4). MSP prevalence ranges from 58.6% for arm and hand to 72.3% and 67.6% for lower back and neck, respectively. MSP prevalence is significantly associated with breastfeeding positions (p < 0.001). A cradle position was the most commonly used (54.8%), and it was associated with MSP across different locations (p <0.001).(14).

STRENGTHS

The current study had the following strengths

- 1. The researcher used a standardized tool for the assessment of the breastfeeding position and musculoskeletal pain.
- 2. The sample size calculation was done to determine the appropriate sample size

LIMITATIONS

The current study had the following limitation

- Postnatal mothers who are doing breastfeeding only for 12 months.
- Postnatal mothers who are having musculoskeletal pain during breastfeeding.

CONCLUSION

There were no association found between breastfeeding position with musculoskeletal pain in postnatal mother with except neck, elbow, lower back. Have you at any time during the last 12 months been prevented from doing normal work because of the trouble, Have you ever hurt your body part in an accident. This suggests that factors other than breastfeeding posture might play a more critical role in the onset of musculoskeletal pain. The findings highlight the need for broader awareness and education on proper breastfeeding techniques to mitigate musculoskeletal discomfort.

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