



LATCH SCORE AS A PREDICTOR OF EXCLUSIVE BREASTFEEDING IN A TERTIARY CARE CENTRE, SIRUVACHUR, TAMIL NADU, INDIA

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Abstract

Background: The optimal way of feeding infants for 6 months is called as Exclusive Breastfeeding. NHFS 5 data states that exclusive breastfeeding was seen only in <50% of the children. Thus the aim of Global Nutrition Targets 2025 is to increase the Exclusive Breastfeeding rate to at least 50%. The aim of the study is to assess the LATCH Score as a predictor of exclusive breast feeding

Materials and Methods: A cross sectional study was conducted from May 2021 to April 2022 in Dhanalakshmi Srinivasan Medical College, which is a tertiary care centre, Siruvachur, Tamil Nadu. Based on inclusion and exclusion criteria the total study participants recruited were 60. Demographic data and laboratory investigations were collected. The data was analyzed using IBM SPSS version 21. P value less than 0.05 was considered to be statistically significant.

Results: The mean age of the study participants was found to be 26.10 ± 3.2 . Majority of the study participants delivered male baby 31(52%). 38(63.3%) mothers delivered through Normal Vaginal delivery. Multigravida were more in our study 36(60%). The latch score tends to increase at the time of discharge. There is a positive correlation ($r=0.6$) seen between latch score and weight gain percentage.

Conclusion: Thus our study states that latch score can be used to improve the breastfeeding and postnatal weight gain which improves the survival of the newborn. It is a simple tool that can be used to identify the mothers at risk of early cessation of breastfeeding and inadequate weight gain in babies.

Keywords: Latch score, Exclusive breastfeeding, Weight, Feeding

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Introduction:

WHO recommends Exclusive breastfeeding for first six months of life(1).This is because it has a protective role against various communicable, non communicable and malignant diseases. Despite of all these benefits still it is not practiced widely (2,3,4,5,6,7).It was reported that among the deaths which occur in children of age 0-5 months showed that the death rate was more among the babies who are not breastfed which is higher (8) compared to the exclusive breastfeeding babies. As exclusive breastfeeding provides the irreplaceable and essential nutrition which is necessary for the Child’s growth and development ,it is considered as a cornerstone for the child survival(9).It is considered as the first immunization as it protects from respiratory, diarrhoeal and other life threatening diseases.

Based on the maternal behaviour and infant sucking skills, Five lactation tools have been identified in the last decade. They are Lactation Assessment tool, Breast Feeding observation Form, Mother-baby assessment tool, Latch scoring system and Mother Infant Breast feeding Progress tool. The Latch tool which we use in our study was designed by Jensen et al in the year 1994(10). It is a composite score which ranges from 0-10.It is similar to the Apgar scoring system. This scoring system is very easy to apply and consist of fewer components. The reliability of the score can be increased by giving proper training for the staffs. This score is used in developed countries to find out the mothers who require support for breastfeeding so that they can sustain(11,12).

According to the NHFS 5 data, the babies who are breastfed immediately within one hour it was 41.8% and exclusively breastfed for 6 months are 63.7%.22 states showed decline in the early breastfeeding initiation and 16 states shows a decline in breastfeeding initiation. The main aim

of the study is to assess the LATCH Score as a predictor of exclusive breast feeding.

Materials and Methods:

Hospital based cross sectional study was conducted in the Department of Paediatrics, Dhanalakshmi Srinivasan Medical College, Siruvachur which is a tertiary care centre. The study was done for a period of one year, May 2021 to April 2022.

Inclusion criteria:

- All mothers delivered at term in our hospital during the study period.

Exclusion criteria:

- Mothers who delivered preterm
- Babies with congenital anomalies, physiologically unstable and sick

Sample Size:

Based on the inclusion and exclusion criteria the study participants were recruited for our study. The final sample size attained during the study period is 60.

Data collection:

After obtaining the ethical committee clearance, the consent was obtained from the parents of the study participants. Demographic particulars like Name, Age, Gender, symptoms were collected and clinical examination was done carefully. Laboratory investigations were done for all the patients.

Statistical analysis:

After collecting the data, it was entered in MS excel Windows10.Statistical analysis was done in SPSS 23. Continuous data were expressed in terms of Mean± Standard deviation and Categorical variable were expressed in terms of numbers(percentages).P value of <0.05 was considered as significant

Results:

Table 1: Demographic profile of the study participants:

S no.	Socio-demographic factors		Number	Percentage
1	Sex of the baby	Male	31	52
		Female	29	48
2	Mode of delivery	Normal vaginal delivery	38	63.3
		LSCS	22	36.7
3	Birthorder	Primigravida	24	40%
		Multigravida	36	60%

The mean age of the study participants found to be 26.10 ± 3.2 Majority of the study participants

delivered Male baby 31(52%).38(63.3%) mothers delivered through Normal Vaginal delivery.

Multigravida were more in our study 36(60%)

Figure 1: Latch score < 8 and >8 among the Normal Vaginal Delivery and Caesarean section at Day 1

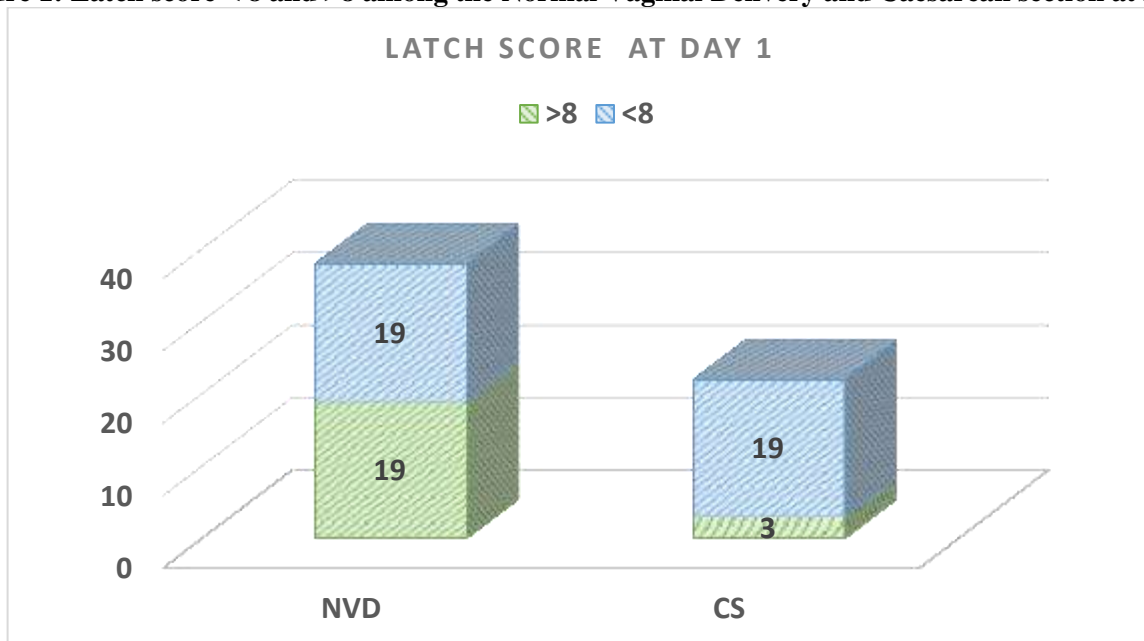
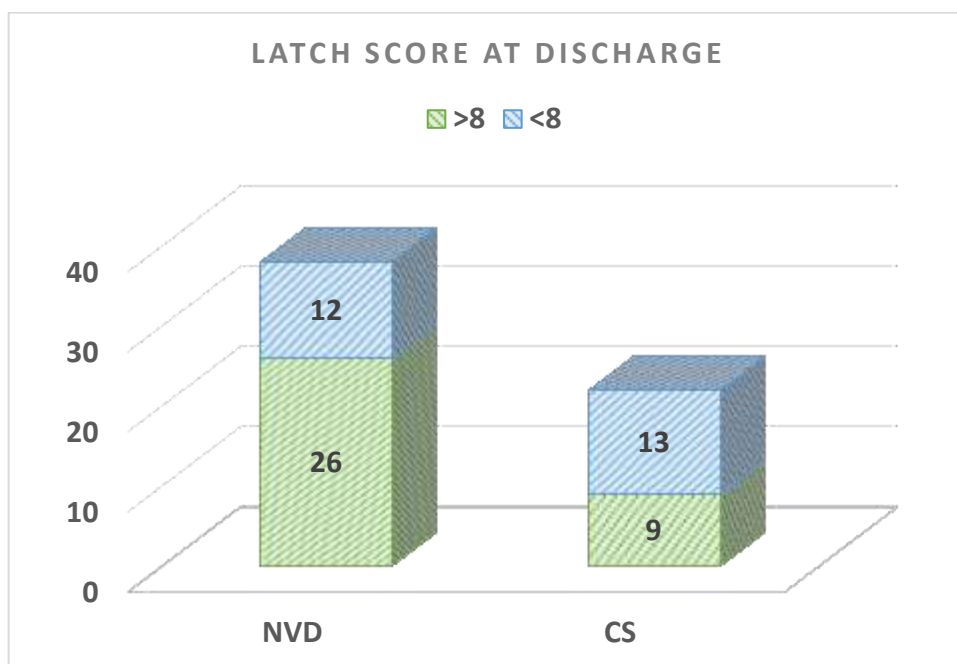


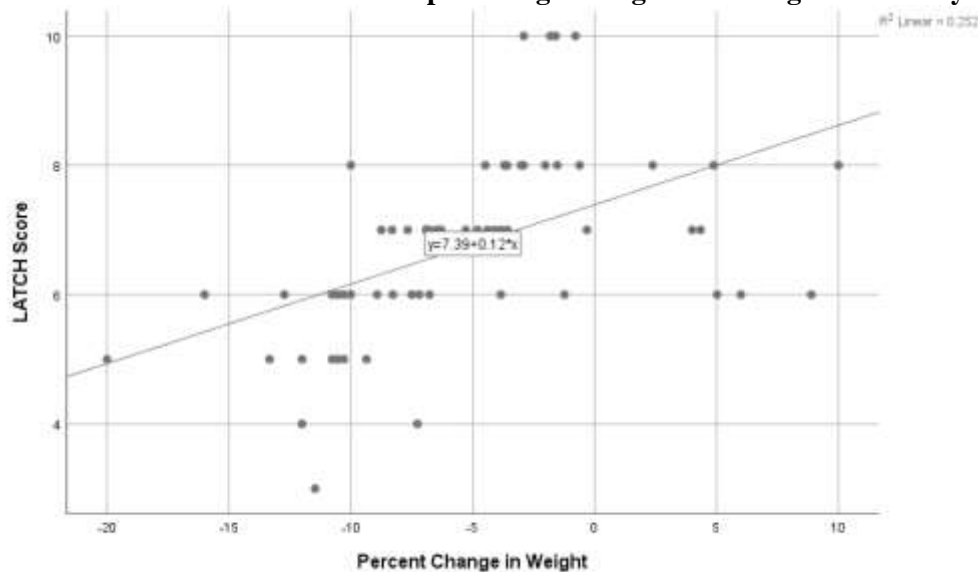
Figure 2: Latch score < 8 and >8 among the Normal Vaginal Delivery and Caesar section on the day of discharge



The latch score tends to increase at the time of discharge compared to the day 1 in both the groups. The difference between the two groups are found to be statistically significant.

Thus increase in the latch score will indicates us that there will be no problem for the mother to give exclusive breast feeding for their babies.

Figure 3. Correlation between latch score and percentage change in the weight on the day of discharge



There is a positive correlation ($r=0.6$) seen between latch score and weight gain percentage

Discussion:

In our study we have included mothers delivered through both Normal vaginal (38) and Caesarean section (22). Similarly Kumar et al (12), Riordan et al (13) and Tornese et al (14) also have included both whereas Sowjanya et al (15) has included only mothers delivered normally. In studies done by Riordan et al, Kumar et al and Sowjanya et al they found that LATCH scores were found to be more for those who are breastfed upto 6 weeks compared to those early weaned at that time. The latch score was evaluated as a whole at birth, 48 hours and at 6 weeks in those studies.

This study helps the caregivers to assist those women who are at risk of early weaning through low LATCH Score. In our study we have educated the women with low score about the importance of breast feeding and to provide support. In Addition to this Sowjanya et al and Greece et al has observed the correlation between LATCH Score and BSES-SF scale. In Sowjanya et al study they found Exclusive breastfeeding was possible when the LATCH cutoff was >8 at 48 hours. The sensitivity was found to be 93.55% and specificity was found to be 92.1%. Based on the above reference we have taken the cut off. The latch score tends to increase at the time of discharge compared to day 1 in both the groups. The difference between the two groups is found to be statistically significant. Mothers with latch score <8 and <9 after 48 hours were intervened and the rate of breastfeeding rates was improved at 6 weeks. The study done by Rugmini K et al also found latch score 8 as Good (18).

In our study we don't have adolescent mothers. Maternal problems were reasoned out for the early weaning. Santo et al (17) study identified the determinants of exclusive breastfeeding cessation before 6 months. The results are grandmother influence, sore nipples, improper breastfeeding technique. As adolescent mothers were in his study, the most common reason to wean early is due to use of pacifier and poor latch.

The rate of exclusive breastfeeding was found to be less than 50% though many organisations create awareness among the mothers and general population and promote exclusive breastfeeding. Breastfeeding and weight gain increases as the latch score increases. Many studies have indicated this.

Conclusion:

Latch score has a statistically significant association with the postnatal weight at the time of discharge. Thus latch score can be used to improve breastfeeding, postnatal weight gain. Thus we can improve the survival of the newborn indirectly protecting them from the infections which are the common reasons for mortality. As it is a simple tool we can easily identify the mothers at risk of early cessation of breastfeeding and inadequate weight gain. Counseling should be given to mothers as well as the relatives.

Limitation:

The main limitation is we followed the babies till 6 weeks during their vaccination so follow up till

6 months was not possible. The sample size was small. A multicentric follow up study has to be done upto 6 weeks and to study the effectiveness and the hindrances.

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Conflict of Interest: Nil

Authors contribution: All authors contributed to the study

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