

# An observational study to evaluate weight gain of exclusively breastfed infants who feed only while sleeping

M T P Mohammed<sup>1</sup>, Shahna Khalid<sup>2</sup>

From <sup>1</sup>Professor, <sup>2</sup>Junior Resident, Department of Pediatrics, Government Medical College, Kannur, Kerala, India

## ABSTRACT

**Background:** We encountered infants in our outpatient department (OPD) who have been breastfeeding normally till 3–6 months of age and stopped feeding while awake without any obvious reason, and continued feeding during sleep. This causes much anxiety and concern to the mother and demands intervention. **Objectives:** The aim of the study was to compare the weight gain of infants who breastfeed only during sleep, with babies who feed normally. **Materials and Methods:** An observational study has been carried out in pediatric OPD, at Government Medical College Kannur. Totally 30 breastfeeding mothers were interviewed and data were entered in a proforma. Weight gain was taken from the growth chart beginning from birth to 6 months. **Results:** Among the 30 breastfeeding mothers interviewed, 12 of them had infants who started feeding only during sleep from around 3 to 4 months of age. On the assessment of growth and development among these infants, it was noted that they were comparable with the infants on exclusive breastfeeding without the problem. No failure to thrive or delayed development was noted in the study group as compared to normal. **Conclusion:** Growth and development was normally attained in infants who breastfeed only while sleeping. As this matter hasn't been studied anywhere so far and is a cause for anxiety in mothers, it demands further research and study.

**Key words:** Breastfeeding, Infants, Sleep, Weight gain

Infant growth monitoring at the beginning of life is of the utmost importance, as the growth behavior is closely related to the child's present and future health [1]. This observational study aimed to address the growth of exclusively breastfed infants born at term who feeds only while sleeping. The definition of exclusive breastfeeding used here is according to the World Health Organization: A child is considered to be exclusively breastfed when he/she receives only human milk, without any other type of food, including water [1-3]. As the recommended duration of exclusive breastfeeding is 6 months, the focus will be on growth in the first 6 months of life. All newborns start direct breastfeeding within 1 h of birth and continue feeding both while awake and during sleep till around 2 years [4].

When we encountered mothers expressing anxiety over their babies feeding only while asleep, we monitored the growth and development of the infants and all were within the expected range. However, as the issue started becoming increasingly common, and was a cause of anxiety for the mother, we thought of creating awareness among pediatricians as it has not been reported previously. Hence, our objective was to compare weight gain in infants who breastfeed only during sleep.


## Study Design, Population, and Setting

This was a prospective and observational study. It was conducted in the pediatric outpatient department of Government Medical College, Kannur, Kerala, from January to December 2022. We included term babies born >37 weeks gestation, with adequate birth weight, and who had an uneventful postnatal period. Our hospital is accredited as a Baby-Friendly Hospital and promotes the initiation of exclusive breastfeeding [3,4]. Only exclusively breastfed infants from birth were included in the study. We interviewed 30 mothers and the data were entered in a proforma.

Twelve of the interviewed 30 mothers expressed concerns regarding their babies feeding in the form of feeding only while sleeping. The infant's growth was plotted in the growth chart and the development assessment was also done. Close follow-up of the said parameters was done from the beginning of the problem which was around 3–4 months (variable in each infant) till 6 months.

## RESULTS

Our data showed normal weight gain and development as per the nomogram in infants who breastfeed only while sleeping. They were only on exclusive breastfeeding. Most of the infants

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**Correspondence to:** Dr. Shahna Khalid, Department of Pediatrics, Government Medical College, Kannur, Kerala, India. E-mail: shahfajiz@gmail.com

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developed the habit by 3–4 months of age. They were observed to take 5–6 feeds during the daytime, all taken while asleep. They had normal urine and stool output comparable with the infants who did not have the habit. Moreover, they slept for 2–3 h after each feed.

**Weight gain pattern in infants on exclusive breastfeeding who feed only during sleep**

| Sample | Weight at the start of study | After 1 month | At 6 months |
|--------|------------------------------|---------------|-------------|
| A      | 6.5 kg                       | 6.9 kg        | 7.6 kg      |
| B      | 6 kg                         | 6.4 kg        | 7.4 kg      |
| C      | 5.9 kg                       | 6.3 kg        | 7.3 kg      |
| D      | 5.5 kg                       | 5.9 kg        | 6.9 kg      |
| E      | 6.6 kg                       | 7.2 kg        | 7.9 kg      |
| F      | 5.6 kg                       | 6 kg          | 6.9 kg      |
| G      | 6 kg                         | 6.5 kg        | 7.3 kg      |
| H      | 6 kg                         | 6.6 kg        | 7.3 kg      |
| I      | 6 kg                         | 6.9 kg        | 7.9 kg      |
| J      | 5.2 kg                       | 5.8 kg        | 6.9 kg      |
| K      | 6.28 kg                      | 7 kg          | 8 kg        |
| L      | 5.8 kg                       | 6.2 kg        | 7.2 kg      |

## DISCUSSION

It was noted that infants who were on exclusively breastfeeding during sleep only were comparable in terms of growth and development to infants who didn't have the habit. Exclusive breastfeeding is the optimal feeding practice to achieve infants' growth and development [1]. Infant growth monitoring at the beginning of life is of the utmost importance, as the growth behavior is closely related to the child's present and future health [2]. When we encountered mothers expressing anxiety over their babies feeding only while asleep, we monitored the growth and development of the infants and all were within the

expected range. But as the issue started becoming increasingly common, and was a cause of anxiety for the mother, it demanded some intervention. Moreover, such an issue hasn't been studied anywhere so far and demands further research [5,6].

The limitation of our study was that our findings cannot be generalized to the entire population because this was a single-center study done in a specific region of India.

## CONCLUSION

Growth and development was normally attained in infants who breastfeed only while sleeping. As this matter hasn't been studied anywhere so far and is a cause for anxiety in mothers, it demands further research and study.

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