

## Growth faltering during first 18 months of life in a cohort of children in an urban area of Sri Lanka and the associated feeding practices

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**Background and objectives:** Faltering in physical growth in exclusively breastfed infants is commonly seen during 4 - 6 months of age in Sri Lanka. This study was designed to assess pattern and timing of growth faltering and its association with the feeding practices in children up-to 18 months of age. **Methods:** A cross sectional descriptive study was conducted in 254 children aged 12 and 18 months attending an immunization clinic. Weight and length were measured using standard methods and data on previous growth were extracted from the Child Health Development Record. Feeding practices were assessed using interviewer-administered questionnaire. A drop of  $>0.25$  in weight-for-age Standard Deviation Score (SDS) from birth SDS was defined as weight faltering.

**Results:** Study population included 53.1% (n=135) of 12-month-olds and 44.5% (n=113) were females. Weight-for-age SDS  $<-2SD$  was seen in 19.3% (n=49) and length-for-age SDS  $<-2SD$  in 10.2% (n=26) at 12 and 18 months of age. Weight-for-length SDS  $<-2SD$  was seen in 17.7% (n=45), and 22.2% of them were  $<-3SD$ . Weight faltering occurred at some point in 64.2% (n=163) during first 18 months of life, and 78.5% of whom, had the onset  $\leq 4$  months of age. Majority (76.6%, n=98) with weight for age faltering by 4 months remained weight faltered at 12 months (p=0.497), while 29.7% (n=38) had a weight-for-length  $<-2SD$  (p<0.001). Prevalence of weight faltering was 50.4%, 46.1%, 48.4% and 48% at 4, 6, 9 and 12 months respectively. Exclusive breastfeeding was given at least until 4 months in 88% (n=223) and up to 6 months in 60% (n=153) while 92.9% (n=236) were breastfed at 12 months, with 38.2% (n=97) were breastfed on demand after six months. Complementary feeding was started before 6 months in 40.6% (n=52) with early weight faltering, but only 20.3% received it with proper consistency. Breastfeeding throughout the night was significantly associated with current weight-for-length being  $<-1SD$  (OR=1.89, CI, 1.04 - 3.45; p=0.037).

**Conclusions:** Early growth faltering was found in this population with high exclusive breastfeeding rates and persisting growth faltering was associated with poor feeding practices. Therefore, timely individualized interventions need to be taken to improve long term growth.

Keywords: growth faltering, breastfeeding, complementary feeding