

### **A31 The associations of infant's health characteristics, feeding practices and lactation management with growth among infants with stridor**

***Nurul Humairah MF<sup>1</sup>, Nurul Husna MS<sup>1</sup>, Khadijah MN<sup>2</sup> and Nor Eyzawiyah H<sup>3</sup>***

*<sup>1</sup>Department of Nutrition & Health Sciences, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia*

*<sup>2</sup>Otorhinolaryngology Unit, Department of Surgery, Faculty of Medicine and Health Sciences, UPM and Hospital Pelajar UPM (HPUPM)*

*<sup>3</sup>Otorhinolaryngologist, Head and Neck Surgeon, Faculty of Medicine and Health Sciences USIM and Hospital Ampang*

Stridor is identified as an upper airway obstruction symptom that can vary in severity, with the prevalence of 78.5% that is caused by laryngomalacia in Malaysia. Disturbance in breathing, sucking and swallowing of infants with stridor during feeding could affect their growth. This study aims to determine the associations of infant's health characteristics, feeding practices and lactation management with growth among infants with stridor referred to Otorhinolaryngology Department of Hospital Serdang and Hospital Ampang. A total of 153 mother-child dyads with child mean age of 3.14±1.2 years participated in this study. The consented secondary data were accessed through the hospital system (e-His) to collect data on infants' health characteristics and growth, while an interviewer-administered questionnaire was done with mothers through phone calls on data related to feeding practices and lactation management. Growth was calculated for weight gain rates (kg/week) and weight-for-age (WAZ) at 18 months. Nutritional status data shows that 95.4% were normal, while others were underweight (1.3%), severely underweight (0.3%) and possible growth problems (2.6%). The mean weight gain rate from weight at first referral for stridor up to the weight when the stridor resolves was 0.10±0.04 (kg/week). There were significant associations between all infant's health characteristics (e.g. birth outcomes, duration and severity of stridor) and WAZ, except age ( $r=-0.083$ ,  $p=0.312$ ). Feeding practices were significantly associated with WAZ except for the onset of cup feeding, while exclusive breastfeeding duration ( $r=-0.173$ ,  $p=0.03$ ) and age stopped breastfeeding ( $r=0.179$ ,  $p=0.03$ ) were significantly correlated with weight gain rates. For lactation management, only holding position ( $p=0.05$ ) was associated with infant growth. Future research should focus on multifactors intervention including lactation management (such as holding and feeding positions) to assist feeding problems that can lead to non-exclusive feeding or faltering growth, specifically for mother-infants with stridor.