Risk Factors of Undernutrition among the Children in Jaffna, Sri Lanka By K. KANDEEPAN, S. BALAKUMAR and V. ARASARATNAM, *Department of Biochemistry, University of Jaffna, Sri Lanka*.

Background: Despite remarkable achievements in health, malnutrition has been a persisting challenge to the health sector in Sri Lanka.

Objectives: To determine the current nutritional status and to identify the risk factors of undernutrition among children aged 1 to 5 years in Jaffna District.

Methods: A Multistage cluster sampling of children aged 1-5 years were recruited. Weight and height were used to derive malnutrition. Causal factors such as socio-demographic and economical factors, sanitary condition, illness, feeding practices and birth weight were obtained. Binary logistic regression was performed to identify the determinants of undernutrition.

Result: Among the total of 846 children, 48.9% (n414) were males. Prevalence of acute and chronic malnutrition was 21.6 and 26.4% respectively while underweight was 33.1%. The significant risk models for undernutrition of children in Jaffna District under forward likelihood ratio logistic regression were children from poor wealth class (Adj.OR 14.36, 95%CI; 1.6-123.2), rural sector (Adj.OR 7.47, 95%CI; 1.59-35.04), fathers who consume alcohol (Adj.OR 1.98, 95%CI; 1.0-3.9), and low birth weight (LBW) (Adj.OR 5.17, 95%CI; 2.7-9.7) for being wasted; LBW children (Adj.OR 6.7, 95%CI; 2.94-15.34), who were not breast fed exclusively (Adj.OR 3.25, 95%CI; 1.82-5.78) for being underweight, and children affected with fever frequently (Adj.OR 2.87 95%CI; 1.4-5.73) for being stunted.

Of the total, 0.4% of mothers were no schooling and they have stopped EBF at the mean of 3.5 months. of the mothers 9.8, 85.4, and 4.5% of mothers had primary, secondary and tertiary educational level, respectively and they have stopped EBF at the mean of 4.2, 5.8, and 5.4 months, respectively. Of this total population, 585 (69.1%) of the mothers stopped breastfeeding their children at the time of data collection. Out of them, 585 children, 55.6% (n 325) of children were breastfed beyond 2 years.

Conclusion: Children in Jaffna District were highly affected by malnutrition. The risk factors for undernutrition are wealth, sector, alcoholic habit of the father, frequent infection, born as low birth weight and fail to receive Exclusive Breastfeeding. The malnutrition can be minimized in Jaffna District by intervene on the associated factors.

Ethical Clearance was obtained from Ethics Review Committee, Faculty of Medicine, University of Jaffna. Authors acknowledged the funding agency of Fonterra Brands Lanka (Pvt) Ltd, Colombo.