Abstract

Background: Undernutrition is the cause of almost 45% of all deaths among children under the age of five. Stunting is categorized as undernutrition. Globally, food insecurity causes hunger and malnutrition. Such chronic undernutrition in childhood not only affects child growth but also causes a long-term negative influence on cognitive and physical abilities. Therefore, in Timor-Leste, which accounts for the youngest population in the Asian region, preventing stunting by focusing on maternal characteristics has a great potential to lead to national prosperity. Our research aims to be adopted and incorporated in community settings by determining the risk factors for child stunting.

Methods: The study design was a cross-sectional study. 4,581 women aged 15 to 49 with children under five years of age were analyzed using the Timor-Leste Demographic and Health Survey (TLDHS) 2016. Logistic regression analysis was conducted to identify the independent variables for the outcome of stunting.

Results: The results revealed that the prevalence of child stunting was 39.7%, which was significantly associated with child factors: age in months (AOR=1.03, 95%CI:1.02, 1.03), being female (AOR=0.73, 95%CI: 0.62, 0.87), very small size at birth (AOR=1.66, 95%CI: 1.08, 2.54), and second birth order (AOR=1.31, 95%CI: 1.01, 1.72); maternal factors: having a short stature (AOR=1.82, 95%CI: 1.38, 2.41); household factors: wealth index quintiles such as being rich (AOR=1.31, 95%CI: 1.02, 1.67), average wealth (AOR=1.43, 95%CI:1.03,1.98), being poor (AOR=1.69, 95%CI: 1.21,2.36) and the poorest (AOR=1.61, 95%CI: 1.16, 2.24), and region; and availability of service factors: antenatal care (ANC) visits over four times (AOR=0.72, 95%CI: 0.54, 0.98), and ANC visits to health centers (AOR=1.37, 95%CI: 1.05, 1.80) and health posts (AOR=1.40, 95%CI: 1.06, 1.85).

Conclusion: The findings indicate that child stunting in Timor-Leste mainly comes from genetic factors (sex of the child, size at birth, and maternal height) and ANC visits during pregnancy (frequency, type, and quality of ANC).