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Dietary Diversity, and Nutritional Status of Mother-Child Pairs by Season in *Enset* Belt, Southern Ethiopia

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Abstract

Several cross-sectional studies indicated a food insecurity problem in southern Ethiopia. However, seasonal trends of diet and nutritional status of mother-child pairs weren't well studied in *enset* cultivating areas of the region. Therefore, this community-based longitudinal study was designed to assess diet diversity, and nutritional status of mother-child pairs by season. The study was conducted on 625 randomly recruited mother-child pairs from Shebedino and Hula woredas of Sidama zone in southern Ethiopia. Data collection was conducted twice, first from January to early February 2017 (dry season), and second round in June 2017 (wet season). Two days 24-hrs mother-child pairs' dietary recall data was collected. Anthropometric measurements were taken following standard procedures. Of the total, 578 mother-child pairs completed the study, making the response rate 92.5 %. Dietary data was analyzed for 145 mother-child pairs randomly selected from the total. Male children accounted for 50.3 % with mean age of 38.3 (8.50) months in both sexes. More than 95 % of the study participated mother-child pairs were from Sidama ethnicity. Religiously, 91.5% of the study participated mothers were protestant with the rest being Muslim (5.9 %), orthodox (1.4 %), and Catholic (1.2 %) religion followers. More than half of the mothers were from male headed households with 97.6 % co-habiting at the time of the survey. Mean family size was 5.2 (1.78). Educational achievement of the mothers involved in this study was low, 24.2 % attended grade 1-4 with 41.3 % being illiterate. Majority of the mothers (87.7 %) were housewives. A paired-samples t-test proved statistically significant negative mean change for wasting, underweight and stunting among study participated children aged 24-59 months. This study demonstrated that more number of children become wasted and underweight in wet season before green maize harvest in *enset* cultivating areas of southern Ethiopia.

Keywords: Enset belt, dietary diversity scores, mother-child pairs, nutritional status, seasonal trend

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