Comparison of maternal nutrition literacy, dietary diversity, and food security among households with and without double burden of malnutrition in Surabaya, Indonesia

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ABSTRACT

Introduction: Double burden of malnutrition in the form of stunted child and overweight/obese mother has been increasing in countries experiencing nutrition transition. This study aimed to compare maternal nutrition, literacy, dietary diversity, and food security of households categorised by nutritional status of mother-child pairs. **Methods:** This cross-sectional study included a total of 685 children under 5 years of age from 14 community health centres (*posyandu)* in a poor urban area of Surabaya, Indonesia. The Lemeshow formula was used to compute sample size. The children and their mothers were categorised into mother-child pairs based on maternal body mass index (BMI) and height-for-age *z-score* for the child: non-overweight mother-non-stunted child (NM), non-overweight mother and stunted child (SC), overweight/obese mother and non-stunted child (OWT), stunted child and overweight/obese mother (SCOWT). Nutrition literacy was determined using questionnaires, dietary diversity was estimated using household dietary diversity scores, and food security was determined using the Household Food Insecurity Access Scale (HFIAS). **Results:** The prevalence of households with SCOWT double burden of malnutrition was 21.2%, OWT 37.7%, SC 15.3% and 25.8% were normal (NM). There were significant differences in maternal nutrition literacy, dietary diversity and household food security status. Households with NM pairs were shown to be most food secure followed by OWT, SC and lastly, the SCOWT pairs. **Conclusion:** Households with double burden of malnutrition have relatively lower nutrition literacy, dietary diversity, and food security. This study indicates the importance of developing nutritional strategies to enable low-income households to make healthy food choices.

Keywords: Nutrition literacy, dietary diversity, food security, double burden of malnutrition, Indonesia

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