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P20-023-24 Initial Prevalence of Metabolic Syndrome in Participants of the INCAI Project, Analysis According to Nutritional Status

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Objectives: The results are part of a project implemented in a community-based manner in urban, suburban, and rural indigenous school settings in the State of Yucatan, with the aim of reducing the risk of developing chronic degenerative diseases, self-esteem, and difficulties in interpersonal relationships among schoolchildren. **Objective:** To diagnose nutritional status and identify metabolic alterations in the child population, as part of the baseline measurement of the INCAI project.

Methods: Weight, height, and waist circumference were measured in students aged between 9 and 12 years from 12 schools that were part of the project. Priority was given to the evaluation of metabolic components in the population with a diagnosis of overweight and obesity using the Z-score values of the WHO BMI indicator for age and sex. Blood pressure was measured, and 5 ml of venous blood was drawn to determine the components of metabolic syndrome, which was assigned according to the NCEPATP III criteria when presenting with at least three of the following criteria: 1) triglycerides \geq 110 mg/dL, 2) HDLc < 40 mg/dL, 3) waist circumference greater than or equal to the 90th percentile for age and sex; and 4) hypertension: SBP and/or DBP \geq the 90th percentile for age, sex, and height. 5) glucose \geq 100 mg/dL. All measurements were performed by trained and standardized personnel according to conventional procedures and protocols.

Results: Thirteen% (n=32) of the evaluated population had a normal nutritional status, 37.2% (n=92) were overweight, and 49.8% (n=123) were obese. 26.7% (CI 21.1,32.5%. n=66) presented with metabolic syndrome; this condition was higher in schoolchildren reporting obesity, affecting 48.8% (n=66). In the population as a whole, the following prevalence of metabolic disorders was identified: hypertriglyceridemia (34%), abdominal obesity (27.9%), hypoalbuminemia (16.2%), hyperglycemia and 14.6% and arterial hypertension.

Conclusions: The components of SM were higher in children with obesity, except for hyperglycemia, which was two percentage points higher in the overweight population. Timely identification of metabolic alterations is a component that

should be considered in childhood obesity prevention and control programs.

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P20-024-24 Assessment of Food Insecurity and Associated Factor Among Elderly Household in Sesa Kebele, Dilla Town, South Ethiopia 2023: Community Based Cross Sectional Study

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Objectives: The aim of the study is to assess prevalence of food insecurity and its associated factor among elderly's household in Sesa kebele, Dilla town, south Ethiopia.

Methods: Community based cross sectional study was conducted in Sesa Kebele, Dilla town, South Ethiopia. Randomly selected household head's from systematically selected elderly's household was asked structured questions. Data were coded, verified, and entered into Epi-Data version 3.1 and exported to the SPSS version 26.0 for analysis. All variables with p value of < 0.25 during bivariate ordinal logistic regression analysis were entered to a multivariable analysis then variable independently associated with the outcome variable at p value less than 0.05 in multivariable analysis were considered as significant variable.

Results: In this particular study, the prevalence of household food insecurity was 91.4 % (95% CI, (-2.747-1.985%). Mildly (8%), moderately (19.2%) and severely (64.2%). In multivariable logistic regression analysis, employee household head [(AOR = 3.24, 95% CI: (1.64, 6.39)], Household monthly income being \leq 2500 ETB [(AOR = 16.02, 95% CI: (4.44, 57.7)], a households consumed 1-4 different food groups [(AOR = 6.10, 95% CI: (3.12,11.94)] and participants who had private house [(AOR = 0.30, 95% CI: (0.15, 0.60)] were significantly associated with household food insecurity.

Conclusions: In general, this study demonstrated the enormous inability of elderly's household to secure access to food due to low socio-economic and dietary diversity. Hence, the results of this study would help to design and implement more effective policies and programs in Dilla town by taking into consideration those variables found to have a significant effect on food insecurity status of elderly's households.

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