**P2-P160** Obesogenic environment and its influence on adiposity on Mexican children and adolescents.

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**INTRODUCTION.**

Obesity is a major public health problem in Mexico. Several factors such as increased sedentarism, inactivity and poor quality diet have been described as explanations and described together as "obesogenic environment (OE)."

**OBJECTIVE.**

We aimed to describe the relationship between the components of OE and the adiposity (fat mass percentage) of Mexican children and adolescents.

**METHODS.**

We carried a population-based cross-sectional study of Mexican children/adolescents (6-17.9 years old). We recruited subjects from public and private schools of Mexico City and performed full paediatric and nutritional assessment to them. We collected data on diet habits by a 24-hour food intake survey, and time dedicated to activities of interest (i.e. screen, sleep, exercise). We further analysed diet habits on The Food Processor Nutrition Software. We measured adiposity by dual-energy X-ray absorptiometry (Lunar-DXA) as percentage relative to total body weight.

We defined OE components as non compliance to:
- WHO recommendation on physical activity ≥ 60min/day.
- AAP recommendation on maximum daily time dedicated to screen ≤ 2 h.
- AHA "intermediate" or "poor" diet score according to recommendations on vegetables, fruits, fish, sodium, sugar-sweetened beverages and whole grains intakes.

We analysed the differences in adiposity between conventional BMI-groups and according to different frequencies of the OE components.

To assess the relationship between OE components and the adiposity, we performed a multi-linear regression analysis.

**RESULTS.**

We assessed 1,449 Mexican children/adolescents, whose general demographic characteristics are shown in table 1.

In plot 1 we show the frequency of different behaviours towards healthy recommendations divided by children and adolescents.

**CONCLUSIONS.**

Mexican children/adolescents are growing in an OE, they show poor compliance to recommendations on healthy habits. Adequate physical activity and dietary intake are those that represent the biggest challenge.

The present study shows that habits such as physical activity, screen time, and diet quality have direct impact on adiposity of Mexican children. Educating families should be the key program to overcome this health problems.

**REFERENCES.**


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