

CO29. ADHERENCE TO MEDITERRANEAN DIET AMONG INDIVIDUALS AT HIGH-RISK OF DEMENTIA: BASELINE RESULTS FROM THE MIND-MATOSINHOS STUDY

Joana Rodrigues¹; Daniela de Sousa^{2,3}; Ana Rute Costa^{2,3}; Vítor Tedim Cruz^{2,4}; Patrícia Padrão^{1,3} on behalf of MIND collaborators

¹ Faculdade de Ciências da Nutrição e Alimentação, Universidade do Porto

² Laboratório para a Investigação Integrativa e Translacional em Saúde Populacional

³ EPIUnit – Instituto de Saúde Pública, Universidade do Porto

⁴ Serviço de Neurologia, Unidade Local de Saúde de Matosinhos

INTRODUCTION: The Mediterranean Diet (MD) has been highlighted as an important prevention strategy for reducing the risk of dementia. However, data on adherence to this dietary pattern and its determinants in people at high risk of dementia are scarce.

OBJECTIVES: To evaluate MD adherence in individuals at high risk of dementia and to analyze the associated sociodemographic, lifestyle, clinical, and anthropometric factors.

METHODOLOGY: Within the MIND-Matosinhos study, sociodemographic (sex, age, education, household income, marital status, professional, social support self-perception), lifestyle (smoking habits, physical activity) health (health status self-perception, hypertension, hypercholesterolemia, and diabetes diagnosis) and anthropometric (body-mass-index, waist circumference) data and cognitive performance were collected through structured questionnaires applied by trained interviewers. MD adherence was assessed using the Portuguese version of the Mediterranean Diet Adherence Screener (MEDAS) questionnaire, and a score ≥ 10 points indicated good adherence to MD. A total of 103 individuals were included in this study. The factors associated with MD adherence were analyzed by calculating the Odds Ratio (OR) and respective confidence intervals (95% CI) using logistic regression by sex.

RESULTS: The participants' age ranged between 36-83 years old (mean age 69.2 ± 7.8), and 56.3% were women. Good MD adherence was observed among 19.0% of women and 17.8% of men. After adjustment for age, education, and marital status, men who reported having reasonable health had lower odds of adhering to MD (Adjusted OR = 0.12; 95% CI: 0.02-0.88) than those reporting a good or very good health status.

CONCLUSIONS: A low MD adherence was observed in this sample of subjects at high risk of dementia. Additionally, a better perception of health status in men was associated positively with good MD adherence.

¹¹ Growth, Exercise, Nutrition and Development Research Group, University of Zaragoza

¹² Instituto Agroalimentario de Aragón, University of Zaragoza

¹³ Instituto de Investigación Sanitaria de Aragón

INTRODUCTION: The influence of urban environment and diet on puberty onset (PO) have been studied isolated, without considering a complete spectrum and their natural interactions.

OBJECTIVES: To explore the influence of the in-utero and early childhood urban exposome, namely the surrounding environment (i.e., the built environment and blue and green spaces) and diet, on PO.

METHODOLOGY: The sample includes 210 children-mother pairs of a subcohort of the INMA Project (Spain), with complete information on urban environment indicators for pregnancy and childhood. The exposures of interest include, as main groups, air pollution, natural spaces, built environment, traffic, UV, noise, meteorology and diet. Breastfeeding duration and KIDMED, collected at 6y-visit, were considered postnatal exposures. Puberty development was assessed through the Pubertal Development Scale, applied to the main caregiver at the 9-y follow-up. Associations between urban environment exposures, diet, and the probability of being in the stage2+ for PO were tested through ExWas adjusted models.

RESULTS: The built environment during the prenatal period (Landuse Shannon's Evenness Index) was related to a lower PO probability at 9y in girls ($\beta = -36.52$; $p < 0.001$). In boys, prenatal air pollution and traffic indicators were related to an earlier PO (e.g., $PM_{2.5}$: $\beta = 20.56$, $p < 0.001$). The prenatal proximity to green and blue spaces seems protective of an earlier onset of puberty (Table 1). Breastfeeding duration appears protective of early PO in both sexes (Boys: $\beta = -2.32$, $p = 0.010$; Girls: $\beta = -1.33$, $p = 0.022$), while a higher KIDMED score was associated with earlier PO in boys ($\beta = 2.13$, $p = 0.028$). The proximity to blue and green spaces during the postnatal period were negatively associated with an earlier PO, while traffic and air pollution was positively associated in both sexes (Table 1).

CONCLUSIONS: The proximity to blue and green spaces, the built environment and breastfeeding are protective factors against earlier PO. Future studies must identify specific targets for preventing early-life exposures that influence an earlier PO and its associated comorbidities.

CO30. EXPLORING THE RELATIONSHIP BETWEEN URBAN ENVIRONMENT, DIET AND PUBERTY ONSET: AN EXPOSOME ANALYSIS WITHIN A POPULATION-BASED BIRTH COHORT

Marta Pinto da Costa^{1,4}; Sofia Vilela^{1,2}; Joana Araújo^{1,3}; Serena Fossati^{4,6}; Carmen Freire^{7,8}; Montserrat de Castro Pascual^{4,6}; Gloria Bueno^{10,13}; Mark Nieuwenhuijsen^{4,6}; Martine Vrijheid^{4,6}; Augusto Anguita-Ruiz^{4,10}

¹ EPIUnit – Instituto de Saúde Pública, Universidade do Porto

² Laboratório para a Investigação Integrativa e Translacional em Saúde Populacional

³ Departamento de Ciências da Saúde Pública e Forenses, e Educação Médica, Faculdade de Medicina, Universidade do Porto

⁴ ISGlobal, Barcelona Institute for Global Health

⁵ Universitat Pompeu Fabra

⁶ CIBER Epidemiología y Salud Pública

⁷ Instituto de Investigación Biosanitaria de Granada

⁸ Spanish Consortium for Research on Epidemiology and Public Health

⁹ Biomedical Research Centre, University of Granada

¹⁰ CIBEROBN, Institute of Health Carlos III