

## Metabolically healthy obesity in a young population assisted by the Family Health Strategy in Brazil. LapARC study

C.A.M. Vasconcellos, R.B. Boghossian, M.K. Machado, C.M.C. Muguet, A.R.B. Cervasio, V.S.M. Flumignan, D.G. Barbalho, D.C.R. Wandermurem, B.D. Marinho, E.G. Botelho, F.R.C. Tostes, F.C. Barradas, R.B.S. Bica, D.B. Kendler, E.S. Muxfeldt

*Estacio de Sa University Medical School, Rio de Janeiro, Brazil*

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**Background:** Obesity is increasing in younger populations, and is associated with a high cardiovascular (CV) risk, however, it is not clear whether metabolically healthy obesity (MHO) may have a lower CV risk or if it is just an earlier stage of the disease.

**Objective:** To evaluate the prevalence and CV risk factors associated with MHO in a young population assisted by a Family Health Care unit in a large urban center in Brazil.

**Methods:** A cross-sectional population study for CV risk assessment in adults aged 20–50 years old from a FHC unit in Brazil. Demographic, anthropometric data and CV risk factors were recorded. All underwent office blood pressure (OBP) measurements, laboratory evaluation (lipid and glycidic profile). Obesity was defined as a BMI  $\geq 30$  kg/m<sup>2</sup> and MHO are those who have less than 3 of the following criteria: hypertension, diabetes, total cholesterol  $\geq 200$  mg/dL, HDL < 40 mg/dL (men) and 50 mg/dL (women), triglycerides > 150 mg/dL and increased waist circumference.

**Results:** A total of 632 individuals were evaluated (60% female; mean age

37±9 years). The prevalence of obesity was 26%, of which 73% were classified as MHO.

Obeses are older, with a higher prevalence of physical inactivity (51% vs 41%,  $p=0.03$ ), hypertension (44% vs 19%,  $p<0.001$ ), dyslipidemia (50% vs 36%,  $p=0.002$ ) and diabetes (7% vs 2%,  $p=0.001$ ) with higher systolic OBP.

MHO compared to unhealthy ones are significantly younger and smoke less. Despite being obese, they have lower BMI (33.6 vs 35.2 kg/m<sup>2</sup>,  $p=0.02$ ) and abdominal circumference (102 vs 110 cm,  $p=0.03$ ), with lower diastolic BP.

**Conclusion:** MHO was more prevalent in this young population and seems to have a lower CV risk, however it is not clear whether these younger and less obese individuals are only at an earlier stage of the disease. Perhaps the CV diseases onset is postponed for a few years. Even so, these individuals should not be excluded from public health policies as a form of primary prevention