**MOODINESS AND DEPRESSIVE SYMPTOMS IN ADOLESCENCE PREDICTS OBESITY AND HYPERTENSION IN ADULTHOOD**

**K. Anand**, S. Srinivas, S. Rajendran, A. Chockalingam

University of Missouri, Columbia, MO, USA

**Objectives:** Available cardiovascular (CV) risk prediction models apply for adults beyond 40 years of age only. Atherosclerosis begins in adolescence where behavioral factors like depressive symptoms may affect lifestyle and dietary choices. Over decades, this may impact the development of obesity, hypertension and other CV risk factors.

**Background:**  Obesity affects a third of the US population and over the next decade is projected to increase to 50%. With the 2017 hypertension guidelines considering blood pressure (BP) > 120/80mmHg abnormal, nearly half (46%) of the U.S. adults now have high BP.

**Methods:**  We screened 20,745 adolescents, age 10-18 years, for self-reported depressive symptoms from wave 1 (1994-1995, mean age 16) of the Add Health database. Subjects reporting frequent crying, moodiness, trouble falling asleep, trouble relaxing, missing social activities, feeling ‘the blues’, feeling depressed, feeling too tired and feeling sad on most days were identified. Follow-up wave 4 (2007-2008, mean age 29) surveyed for CV risk factors like obesity, hypertension and diabetes. Statistical analysis was performed to determine the correlation between childhood depressive symptoms and subsequent CV risk factors.

**Results:**  The prevalence of elevated BP >120/80mmHg was 65.95%. Follow-up data were available for 15,017 young adults (males =7052, 47%). Of the ten self-reported questions pertaining to depression, only moodiness and feeling sad most days predicted adulthood obesity, BMI >30, (p < 0.05). Moodiness independently predicted hypertension (p < 0.05). When adolescents reported three or more of the remaining depressive symptoms, they were at higher risk for obesity but not hypertension. Being female was protective against hypertension, but not obesity.

**Conclusions:**  This study demonstrates self-reported moodiness in adolescence independently predicts later development of obesity and hypertension. Clustering of depressive symptoms also increases the risk of obesity in adulthood. Intervening in adolescence may reduce CV events in adulthood.