**Analyzing NHANES**

**Survey Data**

**Spring 2020**

**Data 606: Capstone in Data Science**

**Literature Review**

Research Papers based on NHANES :

**The Association between Sleep Duration and Metabolic Syndrome: The NHANES 2013/2014**

*Abbas Smiley, David King, and Aurelian Bidulescu*

* Aimed to assess the association of sleep with metabolic syndrome in the 2013/2014 National Health and Nutrition Examination Survey (NHANES). The sample size included 2737 out of 2013 and 2014 NHANES surveys.
* The lowest risk of metabolic syndrome was observed in people sleeping 7 hours/night. Similarly, the lowest mean metabolic syndrome severity score was observed in people sleeping 7 hours/night. Short sleep duration was associated with a higher risk of metabolic syndrome and higher scores of metabolic syndrome severity score in men.

**A Prediction Model for the Peripheral Arterial Disease Using NHANES Data**

*Yang Zhang, MD, Jinxing Huang, MD, and Ping Wang, MD*

* Aimed to build models for peripheral arterial disease (PAD) risk prediction and seek to validate these models in 2 different surveys in the US general population (NHANES 1999-2002)
* To some extent, has moderate usefulness for PAD risk prediction in the general US population

**Phthalates and asthma in children and adults: US NHANES 2007–2012**

*Chinonso Christian Odebeatu, Timothy Taylor, Lora E. Fleming & Nicholas J. Osborne*

* Aimed to assess the direction and strength of the association between urinary phthalates metabolites and current asthma in children and adults (NHANES) 2007–2012.
* Found no clear association between exposure to phthalates and current asthma, except for a significant relationship between MBzP metabolites and self-reported asthma in children. As a result, exposure to phthalates and asthma development and/or exacerbations remains controversial, suggesting a need for a well-designed longitudinal study.