PBIO 504 **Literature Review Assignment Due Date: 191121**

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Identify an association of interest and select 3 - 5 most recent (published in the last 5-10 years) articles to review. Search PubMed (or any other peer-reviewed journal database) for these articles and download to read full text. Complete the literature review table below, list all references after the table, and write a one-page summary of the table.

Write a one-page report that summarizes the content of the table. This may include discussing about the use of different study designs, different study populations, different definitions for the outcome and for the main exposure, different statistical methods used for the analysis, and controlling for different sets of confounders.

Conclude with a short paragraph describing what you learned from this assignment.

In the “Outcome Measure” and “Main Exposure” (or main risk factor) column, include information on how the variable was classified (categorical vs. continuous), if it is self-reported, based on diagnosis, pathological results, etc., and cutoff points used (if applicable).

Association of interest: Recreational marijuana exposure and birth weight

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| **Authors/Year** | **Type of Study / Sample Size** | **Population Characteristics** | **Outcome Measure** | **Main Exposure &**  **Other Variables** | **Statistical Method** | **Result** |
| **Oncken et al. 2019**  **DOI: 10.1016/j.ajogmf.2019.03.006** | Randomized, double-blind, placebo-controlled trial  Placebo: n=67  Treatment: n=70 | Pregnant women who smoked >5 cigarettes daily | Tobacco exposure biomarkers, birth outcomes (weight, gestational age, incidence of preterm birth) | Placebo: behavioral counseling  Treatment: nicotine inhaler | T-test, Fisher’s exact test, multivariate linear and logistic regression | - No change in smoking cessiation between groups  - Higher incidence of preterm delivery in the placebo group  Placebo: 10/67 (15%)  Treatment: 3/67 (4%)  - Incidence of delivering a low birth weight infant was higher in placebo group  Placebo: 10/67 (15%)  Treatment: 4/67 (6%) |
| **Straub et al. 2019**  **DOI: 10.1055/s-0039-1694793** | Retrospective observational study (N=5343), three cohorts  T1 – pre-legalization (n=1610)  T2 – newly leagalized (n=1511)  T3 – post-legalization (n=2222) | Woman who gave birth in Washington state with an available urine drug screen | Low birth weight | Marijuana exposure, specifically in relation to when marijuana was legalized in the state of Washington (detected via urine drug screen at time of birth) | Odds ratio, confidence interval | Marijuana exposure verified by a urine drug screen was associated with low birth weight (LBW); LBW odds ratio of 1.42 (95% CI 1.01-2.01) |
| **Rodriguez et al. 2019**  **DOI: 10.1111/1471-0528.15885** | Retrospective cohort study in a single tertiary center, women age 13-22 yo (N=1206) | All mothers in a maternity programme for young women (13-22yo) who delivered at University of Colorado Hospital between Sept. 2011-May 2017 | Composite adverse pregnancy outcome included spontaneous preterm birth, hypertensive disorders of pregnancy, stillbirths, or small for gestational age | Marijuana exposure defined as marijuana detected on universal urine toxicology test or by self report | Multivariable logistic regression modelling | Marijuana use detected via universal urine testing was associated with a composite adverse pregnancy outcome among young mothers |
| **Crume et al. 2018**  **DOI: 10.1016/j.jpeds.2018.02.005** | Cross-sectional study on 3207 respondents from the 2014-2015 Colorado Pregnancy Risk Assessment Monitoring System |  |  |  |  |  |
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List of References:

Report: