**Annotated Bibliography Set 5**

**Quantitative Research Study**

Jarlenski, M., Krans, E. E., Chen, Q., Rothenberger, S. D., Cartus, A., Zivin, K., & Bodnar, L.

M. (2020). Substance use disorders and risk of severe maternal morbidity in the

United. States. *Drug and Alcohol dependence*, *216*, 108236.

**Summary**

Jarlenski et al. (2020) conducted a groundbreaking statistical analysis to estimate the association between substance use disorders during pregnancy and maternal morbidity. The study, which addresses a significant gap in research, focuses on the relationship between the type of substance use disorder and the increase in maternal age. The findings, which highlight the contribution of substance use disorder in pregnant women to severe maternal morbidity, are of paramount importance to healthcare professionals, researchers, policymakers, and public health advocates.

**Analysis**

Jarlenski et al. (2020) conducted a comprehensive statistical analysis using a multivariable logistic regression of 21 CDC indicators of service morbidity. This rigorous approach, which involved analyzing a database of 53.4 million delivery hospitalizations from mothers aged 18 to 40 from 2003 to 2016, instills confidence in the study's conclusions. The results, which show that cannabis use disorder in pregnant women did not have a high association with the risk of severe maternal morbidity, while opioid use disorder and simulant use disorder did, are robust and dependable.

**Application**

The detailed analysis of the study underscores the fact that pregnant women, regardless of age, who have a substance use disorder are at an increased risk of maternal morbidity. This information, which is crucial for healthcare professionals, researchers, policymakers, and public health advocates, highlights the urgent need for interventions to address substance abuse and its impact on maternal mortality.

**Qualitive Research Study**

Smid, M. C., Schauberger, C. W., Terplan, M., & Wright, T. E. (2020). Early lessons from

maternal mortality review committees on drug-related deaths—time for obstetrical providers to take the lead in addressing addiction. *American journal of obstetrics & gynecology MFM*, *2*(4).

**Summary**

Smid et al. (2020) have meticulously organized a universal, practical addiction assessment and treatment plan for prenatal and postpartum. Drawing from their extensive experiences and data from the United States Maternal Mortality Review Committees (MMRC), the authors have created this plan, specializing in the obstetrician and gynecologist field. The MMRC, a partner of the Center for Disease Control and Prevention (CDC), is a state or local-level multidisciplinary group that reviews deaths that occur during or within one year of the end of pregnancy. Their irrefutable data heavily suggests that drug use screening for all pregnant and postpartum women is crucial. The authors also address the systemic obstacles associated with maternal drug screening.

**Analysis**

Smid et al. (2020) performed the narrative examination, a comprehensive review of existing literature and data, by first researching participation in MMRC, drug screening procedures, and maternal substance use disorders (SUD) treatments. There are only forty-six states and two cities in the United States that must develop an MMRC group to surveillance the root causes of maternal deaths in that region—analyzing the root causes of maternal deaths and what makes the group MMRC unique. Census, the government can analyze death percentages through birth certificates and death certificates. Most medical providers performed case-by-case drug screening. To eliminate bias and patient discomfort, racism, and classism, the authors recommended drug screening for all women. Successful screening promotes positive addiction care, nonpunitive circumstances, and healthy maternal outcomes, offering a beacon of hope for the future. Furthermore, the authors analyze the lack of knowledge and training in obstetrical SUD treatment, such as buprenorphine, and provide a path toward improved understanding and care. SUD treatments, which refer to substance use disorder treatments, are optional medications that help mothers with addiction and maintain the health of the baby.

**Application**

The examination of the MMRC data and the author's professional experience highlight barriers and obtain solutions that medical providers and SUD mothers face during pregnancy. The narrative research is a foundation for illustrating the correlation between substance use disorders and maternal mortality. The author’s experiences and knowledge of SUD pregnancy and postpartum elaborates on barriers that the healthcare system must climb over.

**Quantitative Research Study**

Fuchs, J. R., Schiff, M. A., & Coronado, E. (2023). Substance Use Disorder-Related

Deaths and Maternal Mortality in New Mexico, 2015–2019. *Maternal and Child*

*Health Journal*, *27*(Suppl 1), 23-33.

**Summary**

Fuchs et al. (2023) conducted a risk factor research analysis on the urgent issue of maternal mortality associated with substance use disorder (SUD) in pregnant and postpartum women in New Mexico in 2015. The research delves into the causes of maternal deaths, including demographics, mental health conditions, social stressors, direct substance use deaths (SUD), and non-SUD deaths. The authors collected the data and observed from the New Mexico Maternal Mortality Review Committee (NM-MMRC) and the New Mexico Department of Health. The data underscore the pressing and immediate need for preventive measures, as vast amounts of pregnancy deaths parallel to substance use disorder.

**Analysis**

Fuchs et al. (2023) conducted a univariate analysis, a single variable analysis test, on differences between SUD-related and non-SUD-related deaths. The study assessed eighty-seven maternal deaths in New Mexico from 2015 to 2019. The key findings of the eighty-seven pregnant associated deaths were 49 percent SUD and 51 percent non-SUD related. Furthermore, the data revealed that women with SUD deaths are more likely to die forty-three -365 days postpartum than non-SUD deaths. In terms of dealing with SUD addiction, the research emphasizes the increased mortality ratio associated with the overdose and the social stressors experienced. The research methodology was robust, utilizing a variety of data sources and statistical analyses to ensure the reliability of the findings.

**Application**

The research utilizes statistical data to examine the necessity of preventing maternal mortality and improving the quality of life for pregnant and postpartum women with a substance use disorder. Utilizing the data from this research can display how maternal mortality affects the mother, family, community, and healthcare system.

**Quantitative Research Study**

Ragsdale, A. S., Al-Hammadi, N., Bass, S., & Chavan, N. R. (2024). Racial and Ethnic

Disparities Among Pregnancies with Substance Use Disorder: Impact of Perinatal Outcomes. *Journal of Women's Health*.

**Summary**

Ragsdale et al. (2023) conducted a groundbreaking statistical analysis of maternal morbidity and its association with racial disparities among pregnant women with substance use disorders. This study, which retrieved over 2 million data on inpatient hospitalized pregnant women from a National Inpatient Sample (NIS) from the Healthcare Cost and Utilization Project (HCUP), has shed new light on the trend of severe maternal morbidity (SMM) and adverse pregnancy outcomes (APOs) among those with or without substance use disorder by ethnicity or race. The study effectively observes how ethnicity and race are predictors of APOs and SMM in pregnant women with SUD, providing a significant contribution to our understanding of maternal health and racial disparities.

**Analysis**

Ragsdale et al. (2023) undertook a meticulous and rigorous analysis of a national NIS sample of 2,508,259 pregnant patients with and without substance use disorders from 2016 to 2019. The race and ethnicity percentages are as follows: Black (17.2% / N=431,753), Hispanic (23.3% / N= 585,605), whites (59.4 % N= 1,490,401). The screened substances in the research were the following: tobacco, cannabis, opioids, and stimulants—cocaine, alcohol, sedatives, and hallucinogens. Overall, 6.7 % of pregnant women's hospitalization admissions were for substance use disorder diagnoses. The highest rank of SUD women is White maternal patients at 8.2 percent, Hispanics at 2.2 percent, and Black people at 7.7 percent. Although identified as the second rank highest race in SUD pregnancy, the Black race was an independent variable for SMM and APOs. The authors assess the Black race independent variable through a 95 % confidence interval. Even though all races revealed signs of SMM and APOs, there is considerable evidence that racial disparities exist among specific races.

**Application**

The detailed and stoical methodology addresses the racial barriers of pregnant women with SUD and how it correlates with maternal mortality and adverse maternal outcomes. Statically, the confidence interval calculation can expand the foundations on health benefits or health decline from untreated substance use disorder in pregnant women. Furthermore, it provides compelling evidence of racial disparities and women who have substance use disorders, potentially paving the way for more targeted and effective healthcare policies. This offers hope for a more equitable future in maternal healthcare, where all women, regardless of race, can receive the care they need.

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