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Mental Health Effects of Maternal Substance Abuse Policymaking: Finding a Solution

A Dissertation

Presented to the Faculty of the

Department of Public Policy and Administration

West Chester University

West Chester, Pennsylvania

In Partial Fulfillment of the Requirements for

The Degree of

Doctor of Public Administration

By

Sarah Foster

December 2021

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Dedication

To my husband Derek and daughter Sariah:

Thank you for your patience and understanding as I embarked upon another chapter of excellence. You never complained about the extended hours put into my work, but you continued to persevere and support me in all my endeavors, never allowing my journey to discourage you from accomplishing your own goals.

To: Bishop and Pastor Stewart:

Thank you for being my covering through this process. I am thankful for your prayers that God would see me through it and help me to come out on top in the end. I will not forget how you encouraged me to accomplish my goals but put God first.

Acknowledgments

I would like to acknowledge my advisor, Dr. Jeremy Phillips, for pushing me to consider different perspectives in my work. Although he was busy with other tasks and classes, he presented me with the tools needed to ensure that my research would be one that would be helpful and useful to others. For this, I am forever grateful.

Thank you to my committee members, Dr. Elise Reed and Dr. Michelle Wade. Dr. Reed lent me her extensive knowledge of the field of mental health and substance abuse. Her expertise and willingness to assist made this project less challenging and more reassuring. Dr. Wade is so proficient in qualitative research and helped cultivate my research into a work of art that could be understood past academia.

Thank you to my West Chester classmates, especially Sunayna and Tynslei, for their support and feedback throughout the program. I am lucky to have met both of you. Also, I would like to thank my friend Jackie who encouraged me and listened to me when I was stressed out and wanted to quit.

Lastly, I would like to extend a special thanks to all those who participated in my research interviews. The information obtained was helpful and will play a tremendous role in helping many women who struggle with maternal substance abuse.

Abstract

While each state has varying substance abuse laws and resources for those seeking treatment, many states have regulations that criminally charge expectant mothers seeking substance abuse treatment. Restrictive policies like these encourage these women to conceal their addiction to avoid criminal retaliation and stigmatization. These effects reverberate through communities plagued with poverty, forcing these women to choose between being clean and sober or protecting their children and freedom. Thus, this dissertation examined the adverse effects that strict substance abuse policies have on expectant mothers and suggest that more people in this position would seek treatment if these policies were less restrictive. This dissertation also assessed whether these policies are as effective as believed and how they currently deter a population in need by ignoring the mental health needs of drug-addicted parents. A mixed-methods approach analyzed substance abuse and mental health changes in maternal substance abusers due to specific laws. Qualitative data research included semi-structured telephone interviews from the questions outlined in Appendix A using audio communication. This study's quantitative data consisted of using the 2018 National Survey on Drug Use and Health (NSDUH) administered by the Substance Abuse and Mental Health Services Administration (SAMHSA) and information gathered from the National Center on Birth Defects and Developmental Disabilities (NCBDDD).

Keywords: maternal substance abuse; drugs; alcohol, pregnancy; laws; mental health

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Chapter 1: Introduction

Overview

Recognizing how diverse demographics of females are affected by drug and alcohol abuse is critical for developing effective treatment options for women (Center for Substance Abuse Treatment [CSAT], 2009). For instance, 413 women faced catastrophic repercussions due to consuming substances while pregnant (Lollar, 2017). A study reported that 3 million of 21.7 million people ages 12 and up received substance abuse treatment (Lipari et al., 2016). However, women ages 18-44 make up 40% of individuals who develop substance abuse disorders (Stinson et al., 2005; Compton et al., 2007 as cited in Forray, 2016). In addition, pregnant women who are substance abusers face congenital disabilities such as stillbirths, miscarriages, fetal alcohol syndrome (FAS), cleft lip, heart abnormalities, and sudden infant death syndrome (SIDS). All these components are vital to understanding how to create the best alternatives to treatment for specific women.

Nevertheless, the actions of some maternal drug abusers are motivated by the fear of legal repercussions from the Department of Children and Family Services (DCFS), making it difficult to focus on the need for recovery and sobriety to stay healthy. Still, support services such as 12-step programs, self-management programs that offer parenting classes, prioritized treatment, life skills, and job training are resources that can assist in providing prevention and intervention for expectant mothers. In some cases, support services are combined into what is known as integrated programs. These programs are a form of aftercare that offers mental health and substance abuse services needed to address maternal substance abuser's unique needs and can last between 15-18 months (Niccols, 2012). Increasing support networks, along with motivation, can also have a favorable impact on treatment outcomes (Mauro, 2007).

Furthermore, aftercare and prioritized treatment are not always available options to maternal substance abusers which causes many of these women to flee to states that have more lenient law options than the previous state in which they resided. The Guttmacher Institute (2021) identifies various statutes for how maternal substance abuse should be handled, including prioritized treatment. Yet, implementing strict laws can have both negative and positive impacts because they can influence outcomes. These laws can also encourage maternal substance abusers to hide their addiction instead of seeking assistance due to stigma and lack of motivation. As a result, a study revealed that 73.3% of maternal substance abusers did not feel motivated to disclose their addiction because of the fear and shame of being labeled, while 26.7% did not possess the same feelings (Stone, 2015). Although there is some available information on maternal substance abuse laws, most information regarding this subject is relative to drug choice and congenital disabilities.

Moreover, other states identify fetal protection laws under the same umbrella as child abuse and neglect laws (Vecchiarello, 2020). This generalization can create dilemmas when attempting to decipher how the state legislature addresses maternal substance abuse such as avoiding treatment due to stigma and criminalization. Comparatively, stigma can cause maternal substance abusers to miss much needed services, beneficial to the enhancement of the mother and child. In other cases, maternal substance abuse is addressed through treatment programs and mandated reporting which is discussed in greater detail later in this study. In the alternative, the topic of maternal substance abuse has encouraged some lawmakers to implement clear laws that encourage accountability through treatment (Stone, 2015). Overall, this dissertation will add to existing research on maternal substance abuse by identifying stringent and lenient laws and how they contribute to negative behavioral outcomes utilizing a mixed-methods approach.

Course of Framework

Pregnant mothers seeking care are deterred by the potential ramifications of being charged with assault or abuse. Although some states have strict laws, other states have lenient laws causing intrusive child protection policies to discourage parents from pursuing addiction treatment. Additionally, stigma is present through poor education and work history and can determine how society views maternal substance use (Sherba et al., 2018). Needs exist at various levels and should be assessed to ensure modification in addictive behavior (Best et al., 2008). Substance abuse can cause increased domestic violence, mental health, medical problems, sexual abuse history, malnutrition, and lack of social support, relative to why states should also address the behavior (Milligan et al., 2010). Maslow's Hierarchy of Needs can help maternal substance users assess healthy ways of getting basic needs met, increasing the motivation to heal from the addiction. In hindsight, it depicts how one must achieve basic needs before advancing to the other needs within the pyramid.

Purpose of the Study

Furthermore, many states seek to enforce strict laws as a means of discouraging expecting mothers from abusing drugs or alcohol while suggesting negative consequences for those who already use them (Stone, 2015). The purpose of this positivist mixed-methods study is to provide treatment awareness for maternal substance abuse while evaluating lenient and strict laws to implement change and showcase accountability. This study's quantitative approach consisted of secondary data gathered from the National Survey on Drug Use and Health (NSDUH), which conducts numerous interviews annually on pregnant women who abuse drugs and alcohol (CBHSQ, 2019). Additionally, the qualitative research included nine semi-structured interviews from mental health and substance abuse professionals.

Research Questions and Hypotheses

The following research questions (RQ) help support this mixed-methods study:

RQ 1: What type of maternal substance abuse laws exist in each state?

RQ 2: Does the stringency of the law impact the number of women abusing drugs and alcohol while pregnant?

RQ 3: What are the experiences of professionals treating maternal substance abusers?

Also, the following hypotheses (H) can be made about potential results of the study:

H1: Stringent laws do not change the negative behavior of pregnant women who abuse drugs and alcohol but causes maternal substance abusers to find manipulative ways of avoiding negative consequences.

H2: The outcome of accountability will differ from one state to another due to different policies on lenient or strict laws.

Definitions and Terms

The following is a list of definitions and terms that provide further insight into the information presented throughout this study.

- *Accountability* refers to a circumstance in which someone bears responsibility for events that might occur and can provide a sufficient explanation (Cambridge Dictionary, n.d., as cited in McGrath, 2018).
- *Addiction* is described as a severe, recurrent condition marked by obsessive drug use, regardless of negative effects, along with long-term brain damage (NIDA, 2020).
- *Aftercare* is a form of treatment that may consist of *integrated programs*, specialized programs that reduce maternal substance use (Milligan et al., 2010) and provide preventive services and aftercare. Lawmakers must ensure that maternal substance

abusers have the tools to address accountability through some form of aftercare.

Concurrently, such programs may be challenging to find in some states, and there may be instances where existing programs do not accept expectant mothers into their programs (Stone, 2015).

- *Alcohol abuse* refers to a severe drinking habit with frequent negative repercussions (Nathan et al., 2018).
- *Alcoholics Anonymous (AA)* is a self-help group that aims to help those who struggle with alcohol abuse or dependency.
- *Behavior* depicts one's actions in response to a specific situation.
- *Congenital disabilities* are birth defects that occur once the child is born, affecting development (De Silva, 2016).
- *Continuum care* is another term for aftercare or integrated programs.
- *Criminalization* is present when a specific act is depicted as a criminal offense in the law's eyes and is punishable by imprisonment.
- *Cross-tabulation* is a statistical data analysis commonly used to explore several variables' interrelationships using tables (Qualtrics, n.d.).
- *Drug abuse* refers to the use that is dangerous, causes a person to struggle to meet obligations or legal challenges, and persists despite inflicting chronic harm (NIDA, 2020).
- *Illicit drugs* refer to highly addictive drugs such as marijuana, cocaine, and heroin. According to the 2002–2003 NSDUH, substance abuse has impacted 4.3% of women who use *illicit* (extremely addictive) drugs, 18% who used tobacco, and 9.8% who used alcohol during pregnancy (Shankaran et al., 2007).

- *Impact* refers to how substance abuse influences the mother and the fetus during and after pregnancy.
- *Lenient laws* are represented when maternal substance abusers lack extensive guidelines to hold them accountable and have no significant consequences, such as completing a one-hour online course.
- *Maternal substance abuse* is a significant public health problem linked to various harmful maternal and fetal outcomes (Forray, 2016). However, a robust maternal substance abuse law might provide resources for assisting women effectively.
- *Mental health* refers to one's ability to cope emotionally, socially, and cognitively, determining how individuals react and interact with others (Galderisi et al., 2015).
- *Narcotics Anonymous (NA)* is self-help group that is effective in helping those with drug-related issues.
- *Positivism*, based on Hesse-Biber (2016), explains how one's knowledge of a specific topic is indicative of his or her human experiences.
- *Prioritized treatment* occurs when referrals are selected in a certain order to enhance justice and equality in the administration of treatment (Déry et al., 2019).
- *Statistical Package for the Social Sciences (SPSS)* is software used to analyze quantitative data.
- A *stigma* exists when an individual possesses the fear of being judged based on unacceptable societal behavior.
- A *strict or stringent* law refers to punishment for maternal substance abuse.
- *Substance abuse* occurs when an unnecessary amount of a drug or alcohol is ingested for an unintended purpose (McLellan, 2017).

Delimitations

Delimitations of this study include the following:

1. The semi-structured telephone interviews were restricted only to participants in Tennessee, Louisiana, and Georgia.
2. The participant's responses were based on their professional experiences of maternal substance abuse.

Assumptions and Limitations

The maternal substance abuse demographic determines the relationship between change and behavior in the legislation. The assumption is that fear of being prosecuted leads to poor prenatal care and substance abuse treatment decisions. Nevertheless, pregnant women are viewed as a liability for most rehabilitation facilities and are rejected services in some instances. Some law restrictions suggest "limiting human dignity by restricting the freedoms to which individuals have the right to health" (Amnesty International, 2016, p. 2). Self-reported surveys from the 2018 NSDUH and false disclosure of brand names of substances abused were limitations in this study (Center for Behavioral Health Statistics and Quality [CBHSQ], 2019). Maternal substance abusers could also have trouble remembering the exact number of arrests over a period, contributing to misleading reporting.

Although there is an immense need for maternal substance abuse and mental health treatment, the cost of guaranteeing availability is expensive and serves as a barrier to ensuring proper resources. Substance abuse addictions contribute to approximately \$6.4 billion for substance abuse treatment over three years (Ryan & Rosa, 2020). As maternal substance abuse increases, specialized treatment programs are needed to obtain a more productive life. However, funding for drug and alcohol-addicted babies is a barrier, seeing how it can discourage a state

from providing appropriate resources. Prior studies do not appear to obtain primary data on the number of women arrested because of the Tennessee Fetal Assault Law. However, the data contains the results of pregnant women who are prosecuted indirectly for maternal substance abuse. Stone (2015) suggests that arresting pregnant women for abusing drugs and alcohol could work while contributing to many additional barriers. Although prosecution and arrest may add a more strenuous component to laws, it can also deter maternal substance abusers from seeking treatment (Stone, 2015). Implementing strict maternal substance abuse laws could also harm legislators' trust in the community and the medical field (Lollar, 2017).

Significance of Study

This dissertation contributes to the underdeveloped scope of research on maternal substance abuse laws while finding suggestions to implementing laws that avoid criminalization. A better understanding on the topic could help lawmakers when implementing laws pertaining to this demographic. However, it is essential that lawmakers understand potential causes and time of use during pregnancy and how those decisions may contribute to the health of the mother and child. The time of abuse can be critical due to the potential interruption of the developmental process that the child might encounter during and after pregnancy (Forray, 2016).

In retrospect, addressing maternal substance abuse could reduce the number of women who flee the state to avoid stringent consequences by identifying more lenient yet effective laws. This research is also beneficial to professionals in the field who might provide suggestions for improvement of laws that might be viewed as harsh to them. More knowledge and understanding on the topic could expand how and when treatment is provided for pregnant women who abuse drugs and alcohol. One goal should be to ensure behavior enhancement and further research on the topic will reveal strategies to coping with substance abuse and learning to be a good parent.

However, to expand this perspective and change the structure of the problem, it is vital to examine how laws manage maternal substance abusers and how those approaches can be enhanced.

Summary of the Remainder of the Study

Although, the chapters that follow will include information on existing literature on maternal substance abuse, additional research on maternal substance abuse can help enhance current laws by presenting alternative ways of encouraging treatment and other approaches that are opposed to criminalizing pregnant women. For example, a sample from a prior U.S. study revealed that “43% of mothers were positive for illegal drugs during pregnancy, but only 11% admitted illicit drug use, 24% of cocaine users identified by urine toxicology, 38% of mothers denied cocaine or opiate use during pregnancy” (Lester et al., 2004, p. 5). Another study indicated that maternal substance abuse has been around for a long time, but there is still a need for effective and efficient treatment programs (Lester et al., 2004). Nevertheless, maternal substance abuse will not get better until society takes the appropriate steps to improve it.

The research process reveals gaps in the effectiveness of government-mandated treatment. The literature review provides an overview of the impact of substance abuse laws and aftercare while giving a breakdown of maternal substance abuse laws in Tennessee, Louisiana, and Georgia. These states were specifically used because they provide different perspectives of the consequences of maternal substance abuse. The methodology section takes a closer look into research procedures, reliability, and validity. Also, this study investigates how stringent and lenient laws impact behavior through accountability by utilizing a mixed-methods approach. The appendices section includes interview questions used to conduct semi-structured telephone

interviews with mental health and substance abuse professionals. It also consists of an informed consent form issued to all eligible participants and a flyer used to recruit those participants.

Furthermore, this research produces evidence on why there is such a prolific need for maternal substance abuse policy changes to avoid criminalization. It also showcases how mental health can contribute to risky behavior in various settings. Although there is no direct benefit to the participant, this research helps present knowledge to society on maternal substance abuse laws and the changes needed to ensure a more lasting impact on maternal substance abusers. Overall, this study aims to identify how mental health can affect maternal drug abuse while deciding what constitutes lenient versus strict laws.

Chapter 2: Literature Review

As we continue to deal with the epidemic of drug and alcohol abuse and its effects on the country, it is essential to review the strictness and weakness of state legislatures. While it is true that women can be criminalized for maternal substance abuse in some states, other states do not. This literature review examines the damage that drug and alcohol abuse can cause for pregnant women and how it affects behavior. Additionally, prioritizing mental health may help identify the underlying behavior presented in this specific population, therefore developing the following research questions:

RQ 1: What type of maternal substance abuse laws exist in each state?

RQ 2: Does the stringency of the law impact the number of women abusing drugs and alcohol while pregnant?

RQ 3: What are the experiences of professionals treating maternal substance abusers?

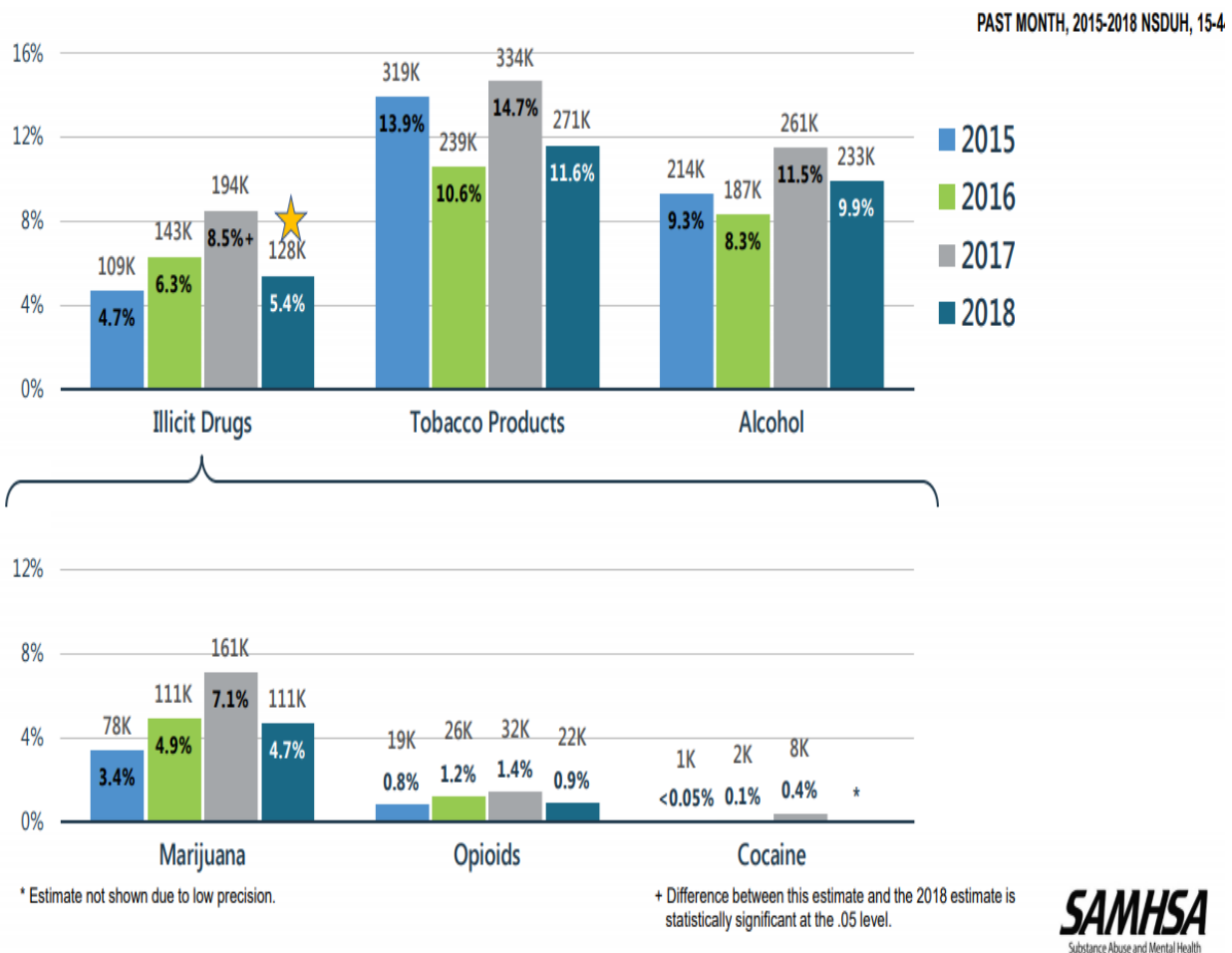
A detailed understanding of why drug and alcohol abuse play a crucial role in behavior is needed to help identify effective and efficient policies and laws.

According to the NIDA (2020), in the United States, substance abuse crosses several demographics that cost the country more than \$740 billion annually with no consistent federal policymaking approach. Although maternal substance abuse is not a new issue, the social impact has sparked policymakers' interest, such as SAMHSA and state agencies such as the Office of Behavioral Health (OBH). More than 380,000 babies in the United States are at risk for exposure to illicit substances, over millions to tobacco, and 550,000 in jeopardy of alcohol exposure while in the womb (Forray, 2016). Maternal substance abuse stakeholders are available in many fields, such as child protection, pediatrics, law, substance abuse, and mental health (Burns et al., 2016).

Moreover, maternal substance abuse research is beneficial because it demonstrates another field component that needs lawmakers' immediate attention. A study concluded that substance abuse has influenced pregnant women ages 15-44 and suggests identifying potential prenatal risks that might have been affected by psychological and social-environmental aspects (Lester et al., 2004). The following charts generated through SAMHSA helped determine the importance of maternal substance abuse by identifying statistical data for maternal substance abusers.

Figure 1

Substance Abuse Among Pregnant Women

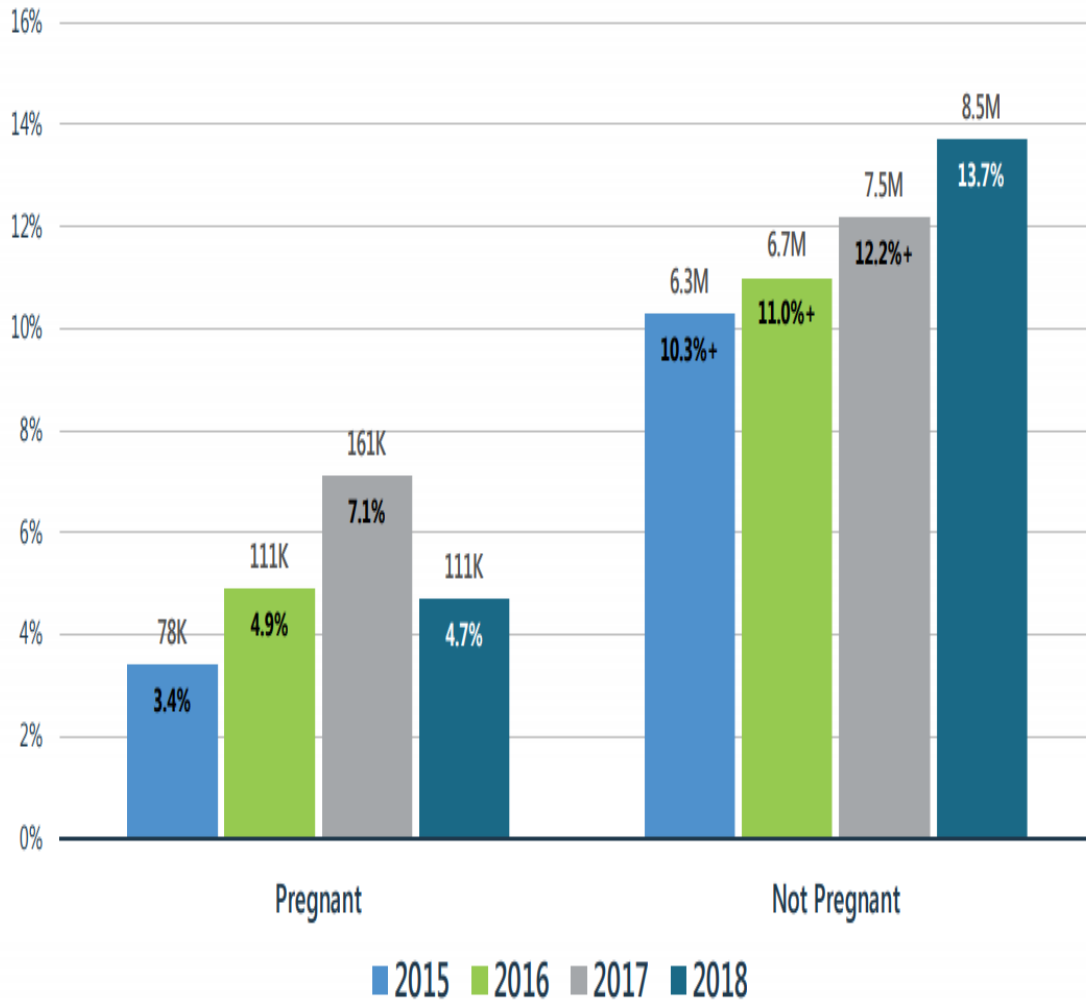


Note: From “The National Survey on Drug Use and Health: 2018” by E.F. McCance, 2018, p. 30. Copyright 2018 by SAMHSA.

Figure 2

Maternal Marijuana Use

PAST MONTH, 2015-2018 NSDUH, 15-44



+ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.



Note: From “The National Survey on Drug Use and Health: 2018” by E.F. McCance, 2018, p. 31. Copyright 2018 by SAMHSA.

The **major themes** for this body of work are as follows:

- Mental illness behaviors that influence maternal substance abuse
- Efficient forms of treatment

- Strategies to enhancing maternal substance abuse policies
- Levels of accountability
- Law mandated consequences
- Strictness versus leniency

Policymakers' strategies for bringing reform and knowledge to maternal substance abuse policy often differentiate across the nation. According to Lester et al. (2004), maternal substance abuse has encouraged a debate about whether to implement punishment or care. As a result, maternal substance abuse causes policymakers to present prevention as an option for care. Lester et al. (2004) suggests the following policy methods:

- Primary prevention aims to avoid getting pregnant.
- Secondary prevention seeks to educate known maternal drug abusers to reduce their use.
- Tertiary prevention involves reducing potential harm to the fetus.

Education on maternal substance abuse is also essential for policymakers to identify the need for resources. However, substance use during pregnancy can impair the fetus and mother and cause the mother to be at risk of being arrested (Stone, 2015).

The American Society of Addiction Medicine (ASAM), a leading organization for addiction medicine, states that substance use disorder (SUD) treatment should be affordable and available to pregnant women who need it (Haug et al., 2014). If the fetus is exposed to drugs or alcohol during pregnancy, it can become vulnerable to congenital disabilities that influence growth and development. ASAM suggests that the screening and assessment process consists of a specific type of placement identified in the ASAM patient placement criteria and pregnancy considerations table below (Haug et al., 2014).

Table 1***ASAM Patient Placement***

ASAM Dimension	Assessment	Treatment Focus
Dimension 1: acute intoxication and/or withdrawal potential	Assessment for maternal intoxication, management of perinatal withdrawal	Detoxification, pharmacotherapy, and preparation for transition to addiction treatment
Dimension 2: biomedical conditions/ complications	Consider maternal health, obstetric complications, teratogenesis, fetal stress, and distress	Prenatal and obstetric care, medical stabilization. Treatment of maternal and/or infant physical health or coordination of services
Dimension 3: emotional, behavioral, or cognitive conditions/complications	Diagnose previous or current psychiatric conditions and screen for subclinical psychological, behavioral, or emotional problems that complicate treatment. Risk assessment for suicidality and psychosis	Treatment of co-occurring psychiatric disorders and coordination with mental health providers. Crisis management and safety planning
Dimension 4: readiness to change	Assess stage of change for reducing or stopping tobacco, alcohol, and illicit drug use. Determine motivation for change caused by external factors (ie, health of infant; avoidance of legal consequences), mandated treatment or coercion due to pregnancy, ambivalence for change, and presence of internal motivation	Motivational enhancement strategies to advance readiness and treatment engagement; psychoeducation and increasing problem awareness for patients in precontemplation and contemplation stages of change; behavioral techniques for patients in action and maintenance
Dimension 5: relapse, continued use, or continued problem potential	Assess potential for prenatal and postpartum relapse, coping skills, and psychosocial risk factors	Continued prenatal and postpartum care for mother, engagement of partner and family. Strengthen coping ability and parenting skills and provide relapse prevention interventions
Dimension 6: recovery/living environment	Determine social and family support and other barriers to engagement, such as substance-using partner or abusive environment	Case management services including housing, childcare, economic, employment, and legal assistance

Note: Adapted from: “Substance Abuse Treatment Services for Pregnant Women: Psychosocial and Behavioral Approaches” by N.A. Haug, M.D. Ellison, and M. McCaul, 2014, *Obstetrics and Gynecology Clinics of North America*, 41(2), p. 270. (<https://doi.org/10.1016/j.ogc.2014.03.001>).

Substance Abuse Laws Defined

Maternal substance abuse is the long-term use of alcohol and other drugs (Lester et al., 2004). Another definition suggests that the abusers’ continual use alters their mood (Buddy, 2020). In defining substance abuse, it is essential to understand that there is a difference in the level of use. For instance, some abuse substances, while others are dependent. Substances can include alcohol, other drugs (illegal or not), and other substances that are not drugs, such as opioids, tobacco, cocaine, and heroin. Substance abuse happens when an excessive amount of a

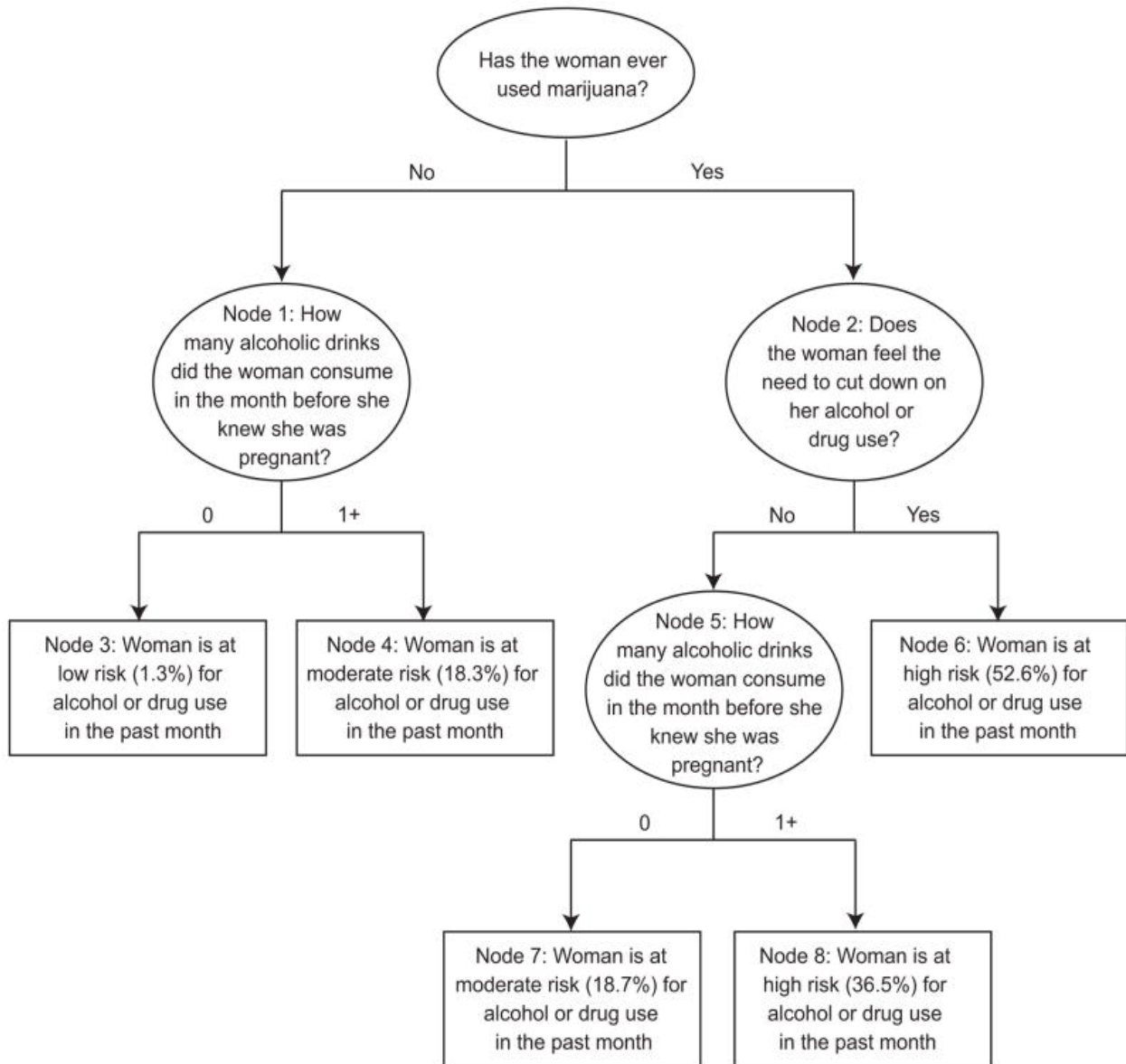
substance is consumed for an unplanned cause (McLellan, 2017). However, drug and alcohol dependency occur when an individual must use more than one substance to obtain an effect regardless of harmful outcomes (Kranzler & Li, 2008). Protection for expectant mothers who use substances is under code 42 CFR Part 2, which protects the client's records and ensures confidentiality (US Department of Health and Human Services [DHHS], 2020). Examples of maternal substance abuse are provided in the following self-created case summary.

- A 30-year-old African American female presents with Bipolar disorder symptoms and issues with marijuana usage. A doctor reported possible maternal substance abuse to DCFS. The recipient struggles with conflict resolution, mood swings, and stress management that may contribute to issues related to abusing drugs. After the recipient gave birth, the infant received a test, testing for the presence of drugs, and tested positive for marijuana. The recipient continued to deny her substance abuse and received a referral for substance abuse and mental health counseling at a local agency.

The above scenario illustrates how maternal drug abusers may encounter difficulties with state legislation and how those concerns are handled in some cases. Because of stigma associated with this topic, maternal substance abuse may be perceived as an epidemic, which occurs when an uncontrollable condition spreads throughout a population (Herzberg et al., 2016). Lawmakers must be aware of how this condition can be represented as a phenomenon that adds to the stigma linked with it. Nonetheless, lawmakers must also establish a way to identify women who struggle with addiction to ensure proper services. In addition to substance abuse, these women require specialized therapy to meet their other needs. In Figure 3, Yonkers (2010) addresses the risks and rates at which pregnant women abuse substances and how they should be classified.

Figure 3

The Classification Tree



Note: From “Screening for Prenatal Substance Use: Development of the Substance Use Risk Profile-Pregnancy Scale” by K.A. Yonkers, N. Gotman, T. Kershaw, A. Forray, H.B. Howell, and B.J. Rounsaville, 2010, *Obstetrics and Gynecology*, 116(4), p. 830. (<https://doi.org/10.1097/AOG.0b013e3181ed8290>).

Pregnant women consume alcohol at an average of 15%, although rates were as much as 20% in the past (Bhuvaneswar et al., 2007). Identifying the risk factors and rates at which women acquire drug misuse problems will assist legislators in finding suitable solutions while

avoiding laws that are criminalizing. In retrospect, maternal substance abuse laws can influence one's emotional and physical responses. and is often depicted as a public health issue (Stone, 2015). For instance, this population of women often face many difficulties related to potentially losing custody and legal consequences which can be mentally overwhelming. On the other hand, some states may view maternal substance abuse as a crime, child neglect, and child abuse. For this study, Tennessee, Louisiana, and Georgia are the focal states for determining those state distinctions. Each of these states has different views of what should be considered punishment for maternal substance abusers. Therefore, the following variables will be examined:

Dependent Variable (DV): drug and alcohol use

Independent Variable (IV): the law

Maternal Substance Abuse Policy Development Using Maslow's Hierarchy of Needs to Exam Behavior Affects

Maternal substance abuse policies can influence behavior and decision-making processes to dictate individual behavior (Gostin, 2000). Abraham Maslow's Hierarchy of Needs implies that individual motivation and demands connect the philosophy of human motivation with the aspects of substance abuse (Kenrick et al., 2010). Maslow further outlines how individuals are motivated to fulfill their own needs, which substance addiction clinicians must examine to ensure appropriate treatment, especially for states that offer prioritized treatment services.

In most cases, implementing new laws ensures efficient problem-solving methods through new laws and enhancing existing maternal substance abuse laws to deter expectant mothers from further use of substances (Stone, 2015). Maslow's hierarchy of needs emphasizes how laws can encourage safer decisions when individuals are aware of their needs and potential resources such as Women, Infant, & Children (WIC), Supplemental Nutrition Assistance

Program (SNAP), and Temporary Assistance for Needy Families (TANF), fulfilling physiological needs. Furthermore, the hierarchy of needs consists of a five-level diagram demonstrating Maslow's idea of motivational theory: physiological needs, safety/security needs, social/love needs, esteem/recognition needs, and the need for self-actualization (Gortner et al., 2007).

Figure 4

Maslow's Hierarchy of Needs



Note: Adapted from "Renovating the Pyramid of Needs: Contemporary Extensions Built Upon Ancient Foundations" by D.T. Kenrick, V. Giskevicius, S.L. Neuberg, and M. Schaller, 2010, *Perspectives on Psychological Science: A Journal of the Association for Psychological Science*, 5(3), p. 293. (<https://doi.org/10.1177/1745691610369469>).

Maslow believed that individuals perform better when they obtain basic needs, but the most essential of the five are physiological needs (Maslow, 1943/2012). Physiological needs typically consist of water, shelter, and sleep, which are needed for survival (Maslow, 1943/2012). If one does not fulfill these needs, they will not obtain the motivation to ensure specific needs. Moreover, physiological, and socioeconomic problems are linked to legal problems and homelessness due to the stigma attached to substance abuse during pregnancy (Metz et al., 2012). Stigma also contributes to poor education skills, continued substance use, poor work history, and the inability to obtain work (Sherba et al., 2018). Therefore, stigma and lack of trust and support from the legal system have influenced this group of women so deeply that many do not seek proper prenatal care, causing them to travel to other states to give birth.

Lester et al. (2004) discussed how substance abuse contributes to 40% of neglect and child abuse cases, affecting child safety. Safety needs determine the level of support an individual might possess from family, friends, or peers (Maslow, 1943/2012). Consequently, lawmakers are concerned about whether criminalizing these mothers will violate their rights or even cause some of them to refuse care out of fear of being convicted (Lester et al., 2004). While rules and regulations may vary from state to state, some prosecute for maternal substance abuse, and others refuse to do so. Furthermore, the fear of stigma can cause maternal substance abusers to adhere to harmful and inappropriate behaviors and feel unwanted.

Feeling loved and accepted is synonymous with not feeling excluded (Maslow, 1943/2012). Therefore, many pregnant substance abusers' needs go unmet, causing the unborn child to suffer from a lack of nutrients and love required for a healthy pregnancy (Stone, 2015). These elements demonstrate why public policy for maternal substance abuse is critical for holding expectant mothers accountable and exposing current emotional, physical, and mental

health issues. As a result, policymakers must be aware of potential behavior ramifications to ensure adequate and efficient maternal substance abuse laws. Maslow also emphasizes the significance of self-awareness, respect, and dignity rather than self-esteem (Maslow, 1943/2012). These components are necessary for positive change and self-fulfillment through proper therapy and employment placement. Maslow addresses this factor in the self-actualization level as self-fulfillment and understanding one's capacity for happiness in life, but many maternal substance abusers cannot achieve self-actualization.

Impact of Substance Abuse Laws on Behaviors during Pregnancy

The behavioral aspects of maternal substance abusers have been proven to be more detrimental than utilizing illicit substances and alcohol (Lollar, 2017). However, lawmakers must be cautious of the punishment bestowed upon these women because of potential adverse effects. Lollar (2017) indicated that lawmakers implement laws criminalizing maternal substance abusers due to a lack of knowledge of the negative impacts of these women having their children taken away. For instance, TENN. CODE. § 39-13-107(c), authorized law officials to criminalize maternal substance abusers for assault through the 2014 Fetal Assault Law, which expired in 2016 (Soderberg, 2016). In hindsight, who is being punished? The child or the maternal substance abuser? Instead, it is essential to consider efficient ways of helping these women to care for themselves and their children properly.

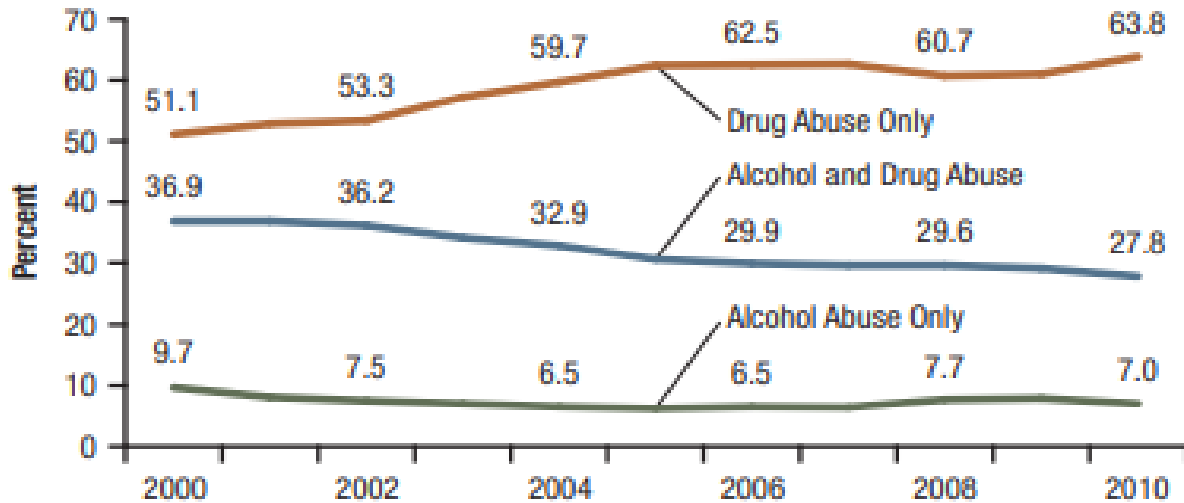
For an expectant mother to prove her ability to care for a child after pregnancy, the following must be present: proper living circumstances, relationships, and legal issues (Economidoy et al., 2012). Therefore, entering drug and alcohol dependency recovery services or parenting courses can indicate accountability and progress. TENN. CODE. ANN. § 33-10-104(e), (f) (2015) states that “pregnant woman referred for drug abuse or drug dependence

treatment at any treatment resource that receives public funding shall be a priority user of available treatment” (Lollar, 2017, p. 959). According to research, women account for 27% of publicly supported admissions for treatment (CSAT, 2000b). Therefore, the benefits of prioritized treatment may include the following aftercare support services: a 12-step program dedicated to assisting maternal substance abusers, self-care groups, intensive outpatient, and inpatient programs. Aftercare addresses the need to teach pregnant substance abusers good parenting, and life skills while providing support. These skills are needed to maintain a better life in the work environment and the home. However, services are sometimes offered together to both the mother and the child, which is an approach that can be beneficial to helping the mother care for the child (Young et al., 2009). For example, mothers might learn parenting skills such as time management and being aware of individual needs for oneself and the child.

About 5.9% of expecting mothers use illegal drugs, while 8.5% drink alcohol (NSDUH, 2012 as cited in Forray, 2016). Treatment facilities may utilize assessment tools such as self-administered questionnaires, intake history, and mother and infant urine tests to identify addiction problems (Lester et al., 2004). Also, one must be aware of apparent mental health issues accompanying maternal substance abusers when matching a recipient to a facility. For example, maternal substance abusers may display signs of substance-induced psychosis, such as depression, anxiety, and post-traumatic stress disorder (PTSD), causing inconsistencies for the mother and fetus (Hser et al., 2015). If mental health issues are apparent, the mother must be placed in a facility that will address mental health and substance abuse needs. The following chart entails the trends in the number of women admitted for treatment who used substances while pregnant (SAMHSA, 2013).

Figure 5

Trends in Maternal Substance Abusers Treatment Admission Ages 15-44



Note: The correlation of maternal substance abusers who seek treatment for drug and alcohol abuse can be depicted in the chart. Adapted from “Trends in Substances of Abuse among Pregnant Women and Women of Childbearing Age in Treatment” by The Substance Abuse and Mental Health Services Administration (SAMHSA), 2013, *The TEDS Report Data Spotlight*. Copyright 2013 by SAMHSA.

Impact of Maternal Drug and Alcohol Abuse in Different Areas

The opioid epidemic has affected maternal substance abuse and child welfare policies more often than any other drug (Krans & Patrick, 2016). Many states have adjusted child welfare laws to include maternal substance abuse to protect the unborn fetus (Guttmacher Institute, 2021). On the contrary, some state laws are more stringent than others, resulting in criminalization or require mandated reporting to the Department of Children and Family Services (DCFS), which is necessary when there is suspicion of child abuse or neglect (CSAT, 2000a). A detailed understanding of why drug and alcohol abuse plays a crucial role in behavior is needed to identify effective policies and laws.

Tennessee lawmakers attempted to decrease the opioid epidemic by implementing a law that criminalizes women for abusing substances while pregnant called the Fetal Assault Law.

Tennessee Code § 39-13-107(c) authorizes the “assault for the illegal use of a narcotic during

Although the Fetal Assault Law has caused an uproar among pregnant women, Tennessee lawmakers passed the bill because of the rapid increase in neonatal abstinence syndrome and opioid withdrawal syndrome in infants (Angelotta & Appelbaum, 2017). The Tennessee Fetal Assault Law grants the state permission to prosecute an expecting mother for using drugs and alcohol. At the same time, the prosecution can only occur after confirming that the child is born harmed or addicted to a drug because of the mother's substance abuse and can carry a sentence of up to 15 years maximum in prison (Rewire News, 2018). As a result, some maternal substance abusers may get an abortion to avoid prosecution.

Approximately 86% of expectant mothers had their charges dismissed or overturned due to the state's inability to prove that the unborn embryo was a fetus (Angelotta & Appelbaum, 2017). In addition, many of the women prosecuted lived in poverty-stricken regions, while 70% of them were women of color (Lollar, 2017). However, after two years of being in effect, a Tennessee house subcommittee decided to vote against the state's law that allows them to criminalize pregnant women who abuse drugs and alcohol (Schultz, 2016). The bill expired July 2016 and has not been reinstated. The basis of the final decision resulted from a floor testimony given by an obstetrician in Nashville. The doctor stated that many women reported self-detox attempts or a plan to deliver out-of-state due to their fear of being arrested (Schultz, 2016). Since the law expired, there have been news and magazine articles published discussing the issue.

In some instances, maternal substance abuse is viewed as child abuse, but states must define child abuse accurately to take such a stance effectively. Child abuse is severe physical or emotional maltreatment that may result in death or unfair treatment (Babakhanlou et al., 2019). While the act of maternal substance abuse is exceptionally neglectful, not every state perceives it as child abuse. Nevertheless, the state of Louisiana is one of the states that stand behind maternal

substance abuse as child abuse (Child Welfare Information Gateway, 2020). A child abuse charge can be detrimental to a maternal substance abuser because it may cause the individual's parental rights to be terminated. Still, it is not a determining factor of an individual being criminalized for that specific act (Angelotta et al., 2016).

Although, the Guttmacher Institute (2021) indicated that specific components about different laws are like other maternal substance abuse laws, many differ and display how laws contribute to healthy or unhealthy outcomes. For instance, in Louisiana, the law discusses how substance abuse professionals, mental health professionals, doctors, and nurses must report any evidence of maternal substance abuse (Child Welfare Information Gateway, 2020). Before mandated reporting, Louisiana viewed maternal substance abuse under involuntary civil commitment, hoping that it would help the state problem-solve and keep substance abusers off the streets (Linden, 1995). Linden (1995) also stated that civil commitment laws are based on prior laws relative to mental health to provide needed treatment that the individual might not have otherwise sought. By doing so, lawmakers will be able to ensure that adequate care for maternal substance abusers is available, because treatment helps people become productive members of society.

Nevertheless, it is an essential part of recovery, but the abuser must want it. Even if maternal substance abusers are court-ordered to treatment, they must desire to receive the available services for treatment to work efficiently. Other states such as Georgia denied criminalizing maternal substance abusers and suggested prioritizing maternal substance abuse treatment (Guttmacher Institute, 2021). Requiring a maternal substance abuser to obtain substance abuse treatment is equivalent to accountability. Otiashvili et al. (2013) revealed several

factors contributing to a pregnant mother's reluctance to participate in substance abuse treatment.

The following are examples of the factors Otiashvili et al. (2013) mentioned:

- childcare
- childhood neglect
- current abuse (sexual/physical/emotional)
- limited knowledge about substance abuse during pregnancy by medical personnel
- low referrals to sexual/reproductive healthcare providers

Also, maternal substance abuse is more prevalent in early motherhood and contributes to the growing need for treatment facilities (Pajulo et al., 2006). Therefore, substance abuse treatment for pregnant women should be a prioritized plan for lawmakers to have available and accessible treatment facilities. Criminalizing the expecting mother may expose other issues such as decreased care for the fetus, while some maternal substance abusers may refuse needed care for fear of being caught and incriminated. Maternal substance abusers should not have to worry about being arrested, losing housing, or custody if they are expected to get better (The American College of Obstetricians and Gynecologists Women's Health Care Physicians, 2011). Moreover, it is necessary to create maternal substance treatment facilities because there is a significant need for advancement, change, and improvement.

Although lawmakers oversee how to conduct policies, several public health issues, rules, and policies are a significant concern due to the possibility of harm. Harm can be present for both the mother and the unborn fetus. Congenital disabilities such as stillbirth, miscarriages, FAS, and cleft lip may exist. For instance, across 19 states, 29 women were prosecuted for maternal substance abuse between 1977-2015 for reasons varying from child abuse, child

endangerment, child neglect, chemical endangerment of a child, and homicide (Angelotta & Appelbaum, 2017).

Other concerns are using drugs through injections, which are prevalent in early childbearing years, and prostitution. Drugs through injections increase the possibility of unexpected pregnancies and sexually transmitted infections (Yotebieng et al., 2016). Maternal substance abuse laws may come into effect due to a state's attempt to address child welfare issues. Nevertheless, many states do not perceive maternal drug and alcohol abuse as a crime until the mother has given birth and has a positive drug screen. Exposure to drugs and alcohol in young to middle-aged adults increases the likelihood of maternal substance abuse. Since any level of exposure to drugs can have a tremendous effect on the fetus, it is essential to identify screening tools that are both valid and reliable.

Although resources are available, they are likely more accessible in larger cities and states than smaller ones. Local, federal, and state law advancement is needed to promote societal change. Several unborn fetuses have died because of mothers overdosing on drugs. Many expecting women who abuse drugs do so because drug use is a coping mechanism for something they have experienced. Other resources may include parenting classes and inpatient facilities for pregnant women. Studies indicate that 19 states in the US have drug treatment programs for pregnant women, with 9 of the 19-offering priority access to expecting mothers (Guttmacher Institute, 2021).

Even though Tennessee criminalized women for maternal substance abuse, some of the other states prosecute but do not have an official law in place that allows holding pregnant drug and alcohol abusing mothers accountable. Alabama lawmakers implemented a law referred to as the Chemical Endangerment Law, which stated that any adult could face punishment for having

a child in a dangerous and drug-infested area (Miranda et al., 2015). Iowa, Vermont, Maine, Rhode Island, and Delaware are the only states to reject the approach to prosecuting for maternal substance use (Miranda et al., 2015). An analysis revealed maternal substance abuse laws in various states and ramifications for violating them. Jarlenski et al. (2017) wrote:

Arkansas has a law defining in utero substance exposure as neglect but does not have specific provisions related to health care provider reporting of perinatal substance use. Hawaii enacted a mandatory reporting law in 2004 and repealed the law in 2010. South Carolina requires mandatory reporting only when more infants born to the same women have been exposed to substances. Tennessee law criminalizes substance use in pregnancy but does have specific provisions relating to reporting to child protective agencies. (p. 5)

Although different behaviors can occur, such as decreased prenatal care and abortions, maternal substance abuse is not viewed as a crime on the federal level. Because of this law, healthcare facilities must follow the Keeping Children Safe Act of 2003 which states that hospitals must comply with reporting any maternal substance abuse (Stone, 2015). Doing so would violate rights to privacy and due process. As a result, many attempts to address maternal substance abuse through law and policy have failed because they hinder these rights. Prenatal care is necessary but is often refused by maternal substance-abusing women due to a fear of being arrested.

Based on the Fetal Assault Law results, it appears that many benefits would be obtained from an increase in treatment availability for women struggling with substance abuse during pregnancy. Treatment should address a woman's total needs while increasing abstinence and enhancing overall recovery measurements, such as teaching skills to improve parenting and mental health (Milligan et al., 2010). Research indicates that 50-80% of children in the state system have at least one parent who abuses substances (Niccols, 2012). Therefore, states should

address aftercare options such as parenting, life skills, and support groups because these skills can help teach pregnant substance abusers to be better parents in the future.

Before the Tennessee law, expecting mothers abused drugs and alcohol and avoided criminalization. After the law, these women still obtained the same behavior. For instance, there was a rise in congenital disabilities and a lack of prenatal care (Amnesty International, 2016). However, they indicated an inability to obtain honesty about malicious behavior and refusal to seek proper prenatal care due to fear of being arrested. Tennessee representatives believed that other matters had developed because of the bill. It appears that the state did not think about long-term problems that form from creating such a law. Lawmakers also did not consider the stigma and negative results that could develop due to a maternal substance abuser's attempt to hide their addiction (Stone, 2015).

The Fetal Assault Law also produced limitations and barriers such as healthcare and safety to the addicted mother and the unborn child. Research indicates that it did not provide adequate substance abuse treatment facilities for maternal substance abusers (Amnesty International, 2016). Maternal substance abuse can cause various risks for both the unborn child and the mother. Regardless of numerous substance abuse facilities for pregnant women, additional research is needed to create more awareness and understanding of maternal substance abuse (Milligan et al., 2010). More exploration into the matter will identify whether results would differ if there were an increase in these types of facilities.

However, there is a need to ensure that maternal substance abusers can later care for their children once they have recovered. It is also unbeneficial to make maternal substance abusers feel that they are the problem. Instead, lawmakers and providers should be a part of the solution and ensure that maternal substance abusers are offered efficient treatment necessary for dealing

with their illness. Providing substance abuse treatment will reduce fetal harm and encourage proper care for the mother and child (Angelotta et al., 2016).

As we search for more ways to protect society and the fetuses in danger, we must also find unbiased ways of protecting human rights. Although Tennessee lawmakers decided to allow the Fetal Assault Law to expire, there are still ways to control the increasing results in women struggling with maternal substance abuse. The bill presented several limitations, but that does not mean that lawmakers should give up on implementing strategies that will be helpful. Maternal substance abuse was a drastic issue before the law, but more problems developed. Within time, policies and laws will change and evolve into something that will potentially help those who struggle with maternal substance abuse. The overall objective is to ensure that maternal substance abuse decreases, and that no violation of rights exists.

Chapter 3: Methodology

While the awareness for women's health continues to grow, maternal substance abuse and its related harms are unevenly propagated across the nation, making it difficult to understand when and why drug abuse becomes an issue for expectant mothers over time (Burns et al., 2016). This research aims to prove that addiction is a disease and should be evaluated through treatment instead of through criminalization. According to MAHEC (2021), a bill is being passed in North Carolina to address medical treatment for mental health and substance abuse women who face postpartum depression. Nevertheless, Chapter 2 discussed the difference in maternal substance abuse laws within the United States, but this chapter outlines a more descriptive version of the study's procedures, data collection, and sample methods. In addition, it identifies steps that were utilized to identify how stringent and lenient laws influence behavior by addressing accountability utilizing a mixed-methods approach. For instance, qualitative research was conducted using semi-structured telephone interviews based on the questions in Appendix A. The quantitative data for this study was collected using the Substance Abuse and Mental Health Services Administration's 2018 National Survey on Drug Use and Health (NSDUH) (SAMHSA) and information from the National Center on Birth Defects and Developmental Disabilities (NCBDDD).

Nevertheless, the concept of how to combine quantitative and qualitative research has long been depicted as a conundrum. For example, Hesse-Biber, (2016) suggests that quantitative research is appropriate for forming a cause-and-effect relationship and predictions about a specific topic. In contrast, Fossey et al. (2002) suggest that utilizing a qualitative approach identifies the significance of human life through experiences. Therefore, both of these

philosophies help to confirm the need for a mixed-methods approach and a positivist methodology.

Furthermore, the positivist methodology can also be implemented in quantitative and qualitative research and allows real-world interactions to be integrated into field advancements (Hesse-Biber, 2016). Positivism was emerged in the nineteenth century and coined by Auguste Comte, who viewed the approach as unavoidable (Koops & Kessel, 2017). Overall, it refers to the belief that one's understanding of a particular subject depicts individually lived experiences while revealing potential solutions for policy enhancement (Hesse-Biber, 2016). In essence, this research portrayed how the stringency of drug abuse policies influence maternal substance abusers through mental health and substance abuse professional experiences and nominal data. Thus, the following research questions apply:

RQ 1: What type of maternal substance abuse laws exist in each state?

RQ 2: Does the stringency of the law impact the number of women abusing drugs and alcohol while pregnant?

RQ 3: What are the experiences of professionals treating maternal substance abusers?

Sampling Method

Secondary data from the 2018 NSDUH was utilized to generate statistical information on the illegal use of drugs and alcohol among pregnant women using cross-tabulation to analyze the data. Using a positivist approach, a total of nine mental health and drug addiction practitioners from Tennessee, Georgia, and Louisiana participated in semi-structured telephone interviews. A snowball sampling was used to identify participants, who were emailed the form in Appendix C to help provide information about the study. Furthermore, the questions in Appendix A were used to guide the interview process. Participants received no monetary reward or direct benefit

for their participation in the study. Also, participants in this study had to be substance abuse or mental health practitioners who were recruited for their competence on the subject. The informed consent form in Appendix B was obtained via email upon approval.

Research Data Collection & Procedures

The NSDUH provided timely information on substance abuse and mental health-related issues. Based on behavioral shifts, assumptions assessed which maternal substance abuse laws were lenient or stringent. In addition, a positivist methodology was necessary to explain unresolved societal problems through life experiences (Hesse-Biber, 2016). This framework helped gather data from nine semi-structured telephone interviews with substance abuse and mental health practitioners from Tennessee, Louisiana, and Georgia using the questions listed in Appendix A and the following variables: DV- drug and alcohol use and IV- the law

Overall, each of the following sections predicted future findings and how each question was addressed in the data analysis.

Section 1: What type of maternal substance abuse laws exist in each state?

Treatment can be addressed both mentally and physically, simultaneously providing coping and parenting skills that effectively contribute to the growth/development of mother and child. A study suggested that adequate treatment involves implementing both substance abuse and prenatal care concurrently, ensuring healthier births (Yonkers et al., 2009). However, to proficiently reach the goal of implementing efficient substance abuse laws, lawmakers must ensure that maternal substance abusers receive priority for treatment which means that professionals may seek to screen potential patients to ensure eligibility. The T-ACE (Tolerance, Annoyed, Cut down, and Eye Opener) is a screening tool sometimes used for recognizing risky maternal alcohol use (Russell, 1994). The TWEAK (Tolerance, Worry, Eye Opener, Amnesia,

and Cutdown) is another screening tool identifying heavy alcohol dependency in expecting mothers (Russell, 1994). Although the T-ACE and the TWEAK are good assessment tools, utilizing these tools was unnecessary for this study because participants were mental health and substance abuse professionals. However, priority treatment will be discussed throughout the chapter, and it is essential to be aware of instruments that can be used to determine eligibility based on level of need, especially for states who do not offer prioritized treatment.

The policies of Tennessee, Georgia, and Louisiana vary on the topic of maternal substance abuse. For instance, Tennessee criminalizes maternal substance abusers, while Georgia law prioritizes substance abuse treatment (Guttmacher Institute, 2021). In the alternative, Louisiana policy considers maternal substance abuse as child abuse. Thus, while the law does not prosecute the mother, treatment is encouraged, and child welfare agencies investigate. Moreover, this study defines how some statutes utilize treatment measures while some criminalize maternal substance abusers. The following hypotheses (H) were made:

H1: Stringent laws do not change the negative behavior of pregnant women who abuse drugs and alcohol but causes maternal substance abusers to find manipulative ways of avoiding negative consequences.

H2: The outcome of accountability will differ from one state to another due to different policies on lenient or strict laws.

By identifying the number of states that criminalize, lack legislature specific to maternal substance abuse, and offer prioritized treatment, the difference in maternal substance abuse state laws can be depicted. Identifying how stricter laws influence the number of women who abuse substances while pregnant was helpful. The expectation was to find that providing treatment options were more effective than criminalization.

Section 2: Does the stringency of the law impact the number of women abusing drugs and alcohol while pregnant?

The quantitative data collected from the 2018 NSDUH was analyzed using the cross-tabulation method, an Audio Computer-Assisted Self-Interview (ACASI) software used to administer survey questions securely (CBHSQ, 2019). In addition, two T-test analyses were also conducted in the Statistical Package of Social Sciences (SPSS) using information collected from the NCBDDD to identify statistical quantitative data on how drug and alcohol abuse have affected pregnant women. The presence of drug and alcohol use are the dependent variables, and the law is the independent variable. The researcher created a typology of the law and a thematic approach to help expand deeper into the research.

Furthermore, the NSDUH employs a weighted count, determining how many individuals in the population are represented by each sample participant, while the standard error (SE) estimates the standard deviation (DHHS et al., 2019). Using a cross-tabulation to analyze the data in the 2018 NSDUH database determined the numerical data of pregnant women who use drugs or alcohol. However, creating a typology of the law revealed data on law infringements while proving why women are more receptive in states that provide treatment options. The table found in Appendix F provides a more detailed view of the correlation between strict laws and lenient laws.

Reliability and Validity of the NSDUH

Previous research indicated that maternal substance abusers avoided criminal charges by circumventing treatment and detection of using a substance (Stone, 2015). Proving those comparisons, indicates reliability in interview responses. Therefore, the criteria for participating in this study involved being a mental health or substance abuse professional such as a licensed

professional counselor (LPC), a licensed clinical social worker (LCSW), a clinical psychologist, psychiatrist, mental health professionals, and a licensed addiction counselor (LAC) from Tennessee, Louisiana, or Georgia. In addition, all interviewees were required to be forthcoming about situations they have encountered, which could cause potential harm to the fetus if not handled carefully (Jarlenski et al., 2017).

The purpose of the 2018 NSDUH was to collect data on the number of women that abuse drugs and alcohol abuse during pregnancy. Also, data from the NSDUH determined how being arrested and booked for breaking the law affects one's understanding of drug and alcohol abuse's impact on pregnant women. For example, prior research revealed that 43% of substance-abusing mothers were positive for illegal substances, and 24% of those were cocaine users (Lester et al., 2004). However, the NSDUH has some inaccuracy because it does not reveal how substance abuse might have improved over time (CBHSQ, 2019).

The NSDUH provided secondary statistical data that identified the frequency and demographics of maternal substance abusers, ages 12-44, arrested and booked for breaking the law. Results vary among different states because of different viewpoints on lenient or strenuous laws and self-reported based data. There were discrepancies in the data collected from the self-reports because it is not always reliable in identifying the specific drugs taken, precisely when respondents classify drugs by their brand names (CBHSQ, 2019). However, the data collected by the NSDUH has been used by various organizations and individuals. According to NSDUH (n.d.), the following is a list of those entities:

- The White House Office of National Drug Control Policy
- Substance Abuse and Mental Health Services Administration (SAMHSA)
- The Partnership to End Addiction

- Local and state substance abuse agencies
- United States Department of Education
- Department of Transportation
- The Office on Smoking and Health

Furthermore, there are 70,000 interviews conducted through the NSDUH from individuals in the community that reside in “noninstitutional” settings annually (Frechtel & Copello, 2007). The validity of interviews is present when the interviewer has chosen the proper sample and efficient interview questions. Screening tools help identify maternal substance abuse users, validating their practicality and accuracy for finding a solution. Still, one problem with using screening tools is that once maternal substance abusers are identified, they leave the state to have the baby to avoid strict consequences (Stone, 2015). The interviewing professionals should know about maternal substance abuse and mental health, conducted through content validity (Halek et al., 2017).

Section 3: What are the experiences of professionals treating maternal substance abusers?

Using interviews to gather data on maternal substance abuse was relevant because it enables policy reforms. In addition, experiential learning can broaden one’s understanding of a situation and, in turn, aid in the development of more effective methods for determining suitable solutions. Therefore, identifying themes helped determine the correlation of laws that criminalize and those that offer prioritized treatment or targeted programs. The ultimate objective was to ensure that each state’s law for maternal substance abuse was studied and classified to identify difficulties or leniency. Therefore, this study’s qualitative research included a series of nine semi-structured telephone interviews with mental health and substance abuse professionals in

Tennessee, Louisiana, and Georgia through audio communication using a digital recorder for 1-1 ½ hours.

A positivist framework helped to convey a better understanding of maternal substance abuse using the questions in Appendix A based on the experiences of substance abuse and mental health practitioners. Participation in this study was voluntary, and all participants had the right to change their minds and stop being a part of the study at any time. Participants did not receive payment, and there was no anticipated direct benefit. Eligibility for this study required that participants be a substance abuse or mental health professional selected based on their knowledge of the topic. Appendix C served as an informational document for recruiting participants through email using snowball sampling based on referrals identified by professional contacts. Snowball sampling was essential because it allowed the researcher to identify appropriate interviewees for the study. Additionally, snowball sampling was an effective way to obtain interviewees, especially when a participant was unable to participate for unforeseen circumstances. Snowball sampling invites recommendations for interviewees from participants who have previously engaged in the process.

Ethical Considerations

Confidentiality is a crucial component in collecting qualitative data during interviews. Pregnant women who abuse drugs are considered a vulnerable population. As a result, substance abuse and mental health providers will engage in the interview process to gain a clinical perspective on maternal substance abuse legislation. Mental health and substance abuse providers must acknowledge confidentiality because they must adhere to the Health Insurance Portability and Accountability Act (HIPAA) to protect past and current client information. Most

of all, professionals must ensure that they obtain the ability to separate career and individual standards.

Mental health and substance abuse professionals have a duty to the law and its constituents to obtain confidentiality. Therefore, semi-structured interview questions were formulated to address the sensitivity of this matter and did present questions that would be inappropriate by causing professionals to present a client's identifying information. As a result, participants were reminded not to share identifying information of prior clients. However, the risk is minimal since this study only required information based on participant's work experiences. Also, participants were allowed to object to any information they might not want to share before publishing. Many research studies exclude maternal substance abusers due to the liability and potential mental health and emotional challenges triggered by stressful questions (Blehar et al., 2013). Therefore, this study only incorporated mental health and substance abuse providers to protect expectant drug and alcohol-addicted mothers and their fetuses.

Participants who were chosen to participate were asked to agree to and sign an emailed consent form in Appendix B, verifying permission to interview, which should be returned to the primary investigator's email address. Semi-structured telephone interviews were recorded using a digital recorder to protect participants and ensure confidentiality. All participants were assigned a pseudonym name and a write-up of research to ensure comfort before publishing. All interview recordings and consent forms were kept private. The data collected for this study is stored in an encrypted file that will be available for no more than three years after manuscript development. Microsoft software assisted with the transcription process, while a thematic analysis identified similarities among participants.

Summary

Overall, this chapter's objective was to obtain the best approach for answering the research questions proposed. The sample techniques, data collection from interviews, the 2018 NSDUH, ethical issues, and participant viewpoints were covered. The positivist approach is practical and encouraged participants to use individual experiences to improve legislation. Each participant shared those experiences in 1-1 ½ hour semi-structured telephone interviews. Also, this research provided evidence on why there is such a prolific need for maternal substance abuse policy changes to avoid criminalization. It also showcased how mental health contribute to risky behavior in various settings. Although there was no direct benefit to participants, this research helped present knowledge to society on maternal substance abuse laws and the changes needed to ensure a more lasting impact on this population. Chapter 4 will provide specific details about the research design that answered the research questions, while revealing the results of this study.

Chapter 4: Data Analysis and Results

This study investigated effective legislation for women who abuse alcohol and drugs during pregnancy by comparing strict and lenient legislation and identifying methods of attaining responsibility. The use of a positivist perspective revealed how society functions and how certain beliefs impact legislation. However, differences in laws were noted throughout the study and data gathering procedure. Statistical outcomes and experimentation were also obtained by conducting interviews, while helping identify the frequency of maternal substance abuse in different demographics. Moreover, a mixed-method approach, which applied a positivist methodology was implemented to obtain further research on maternal substance abuse through the following research questions:

RQ 1: What type of maternal substance abuse laws exist in each state?

RQ 2: Does the stringency of the law impact the number of women abusing drugs and alcohol while pregnant?

RQ 3: What are the experiences of professionals treating maternal substance abusers?

Secondary data from the NSDUH and nine semi-structured telephone interviews from mental health and substance abuse professionals in Tennessee, Louisiana, and Georgia were used to help answer the previously mentioned research questions. The interviews were transcribed using Microsoft and analyzed using a thematic analysis approach, helping prove why treatment would be more effective than criminalization. The thematic approach allowed the research to be broken into categories identifying the following themes: mental illness behaviors that influence maternal substance abuse, efficient forms of treatment, strategies to enhancing maternal substance abuse policies, levels of accountability, law mandated consequences, and strictness

versus leniency. The following information addressed the research questions in sections while identifying the sample, data analysis, collection methods, and quantitative and qualitative data.

Section 1: What type of maternal substance abuse laws exist in each state?

Sample

Nine semi-structured telephone interviews were conducted using a digital recorder to help gather further information about stringent and lenient laws. The comparison was narrowed down to three states that presented different requirements: Tennessee, Louisiana, and Georgia. Each participant was asked a series of questions relative to maternal substance abuse policymaking using the questions provided in Appendix A. All participants were obtained using a snowball sampling and had previously or were currently working with maternal substance abusers. Each participant also had different experiences but similar views about maternal substance abuse laws and how lawmakers can enhance those laws in the future. Participants were not offered monetary compensation but were provided detailed information about the study using the form in Appendix C and informed consent in Appendix B.

Data Collection

This study used a mixed-methods approach which consisted of both quantitative and qualitative data. The quantitative research was collected from secondary data using the 2018 NSDUH and two T test analyses and the qualitative data was collected using interviews. The nine interviews were conducted with mental health and substance abuse practitioners in Tennessee, Louisiana, and Georgia. The semi-structured questions in Appendix A served as a guide to assist with the interviewing process. Each participant was made aware of their rights and asked to provide informed consent to protect their identities. They were also asked not to provide any information that could potentially identify past or present clients, breaching confidentiality.

Additionally, using a mixed-method approach helped disclose information that already exist on the topic, while the nine interviews helped provide new prospective and conformation of prior findings.

The purpose of the NSDUH was to provide a support system for treatment, while unveiling why that treatment was imperative to recovery. Understanding the number of pregnant women who were arrested and abused substances each year helped disclose explanations to why certain behaviors were present among these women. Additionally, the NSDUH data was collected from self-reported survey information on the number of women who used substances while pregnant. The reports also revealed how many women had been arrested for breaking the law. Data collection from these variables helped expose how many women encountered legal issues while they were pregnant. It also disclosed the average age group of maternal substance abusers as 12-44 years of age.

Data Analysis and Results

In hindsight, there are various policies that address consequences for child welfare related issues. Each state might choose to handle the maternal substance abuse from a more holistic approach than others, treating it as a disease. Thus, some suggestions consist of mandated reporting, prioritized treatment, warning signs, child neglect/abuse, and civil commitment. Several states prioritize treatment such as Arizona, Georgia, West Virginia, and Illinois. Other policies include but are not limited to mandated reporting which include Louisiana, California, Vermont, and South Dakota. However, these states are not the only states that offer prioritize treatment and mandated reporting. While there are several states that consider prioritization, mandated reporting, neglect, abuse, and civil commitment, others criminalize maternal substance abusers. A detailed outline of laws and consequences can be found in Appendix F. However, the

following tables provide a list of ASAM recommendations for maternal substance abuse policies throughout the United States and categories of maternal substance abuse legislature by state.

Table 3

Maternal Substance Abuse Policies

Policy	Policy Description
Mandatory Warning Signs	Require posting notices in settings, such as licensed premises that sell alcoholic beverages and healthcare facilities, where pregnant women receive treatment. Policy rules stipulate who must display warning signs, what terminology to use on the signs, and where the signs must emerge. The warning language required across jurisdictions varies in detail, but in each case, it warns of the risks associated with drinking during pregnancy.
Priority Treatment	These provisions mandate priority access to substance abuse treatment for pregnant and postpartum women who abuse alcohol.
Prohibitions Against Criminal Prosecution	These provisions forbid the use of the results of medical tests, such as prenatal screenings or drug tests, which can serve as evidence to criminalize women deemed a threat to a child or fetus.
Reporting Requirements	Professionals such as doctors, nurses, LPCs, LCSWs, and LACs are mandated to report any inkling or proof (drug test or prenatal screening) of drug and alcohol abuse or maternal substance abuse. Reporting may be related to suspicions of child neglect or for data gathering purposes.
Child Neglect/ Abuse	Child neglect or abuse addresses a pregnant mother's behavior before giving birth and possible harm resulting. This statement assumes that the use of illegal substances during pregnancy is depicted as child abuse/ neglect.
Civil Commitment	A Civil commitment is an involuntary compulsory commitment of a pregnant woman to treatment or mandatory involuntary placement of a pregnant woman in the state's protective custody to protect a fetus from prenatal alcohol exposure.

Note: From "Forty Years of State Alcohol and Pregnancy Policies in the USA: Best Practices for Public Health or Efforts to Restrict Women's Reproductive Rights" by S.C.M. Roberts, S. Thomas, R. Treffers, and L. Drabble, 2017, *Alcohol and Alcoholism*, 52(6), p.717. ([https://doi: 10.1093/alcalc/agx047](https://doi.org/10.1093/alcalc/agx047)).

Table 4***States Policies Implemented In Specific States and the District of Columbia***

Prioritized Treatment	Mandated Reporting	Child Neglect/Abuse	Civil Commitment	Criminalization
1. Alabama	Alaska	Alabama	Minnesota	Alabama
2. Arizona	California	Arizona	South Dakota	South Carolina
3. Arkansas	District of Columbia	Arkansas	Wisconsin	Tennessee
4. Delaware	Louisiana	Colorado	_____	
5. Georgia	Massachusetts	Florida	_____	
6. Illinois	Michigan	Hawaii	_____	
7. Iowa	Minnesota	Illinois	_____	
8. Kansas	Montana	Indiana	_____	
9. Kentucky	Nevada	Iowa	_____	
10. Maine	New Hampshire	Kentucky	_____	
11. Missouri	New Jersey	Louisiana	_____	
12. Oklahoma	New Mexico	Maine	_____	
13. Tennessee	New York	Minnesota	_____	
14. Utah	North Carolina	Missouri	_____	
15. West Virginia	North Dakota	Nevada	_____	
16. Wisconsin	Pennsylvania	New Hampshire	_____	
17. _____	Rhode Island	New Jersey	_____	
18. _____	South Dakota	New Mexico	_____	
19. _____	Tennessee	North Dakota	_____	
20. _____	Vermont	Oklahoma	_____	
21. _____	Virginia	Oregon	_____	
22. _____	_____	Rhode Island	_____	
23. _____	_____	South Carolina	_____	
24. _____	_____	South Dakota	_____	
25. _____	_____	Texas	_____	
26. _____	_____	Utah	_____	
27. _____	_____	Vermont	_____	
28. _____	_____	Virginia	_____	
29. _____	_____	Washington	_____	
30. _____	_____	Wisconsin	_____	

Section 2: Does the stringency of the law impact the number of women abusing drugs and alcohol while pregnant?

Quantitative Analysis

A cross-tabulation assisted the researcher in identifying relationships among different variables. Utilizing secondary data from the NSDUH, allowed the researcher to identify the correlation between women that were pregnant, arrested for breaking the law, and suffering with

illicit drug and alcohol dependency or abuse. In the tables and figures shown below, a cross-tabulation analysis was used to analyze data from the NSDUH. It highlighted database variable outcomes and the total number of pregnant women who were arrested for breaking the law in general. The tables and figures also identified the average age groups of pregnant women abusing substances and breaking the law. Interviewees in this analysis revealed the age groups that they encountered, which helped the researcher make a comparison of the ages reported in the interview and those that were reported during NSDUH’s data collection process.

Table 5

Example of NSDUH Database Variable Outcomes

EVER ARRESTED AND BOOKED FOR BREAKING THE LAW: 1 – Yes		RC- ILLICIT DRUG AND ALCOHOL DEP OR ABUSE- PAST YEAR		
RC- Pregnant Females Aged 12-44		Total	0- No Unknown	1- Yes
Total	Weighted Count	40,721,081	32,701,801	8,019,280
	Count SE	628,023.3	544,081.6	289,121.7
	Column %	100.00%	100.00%	100.00%
	Column % SE	0.00%	0.00%	0.00%
0- Otherwise	Weighted Count	40,441,868	32,470,041	7,971,827
	Count SE	618,572.8	537,700.4	285,873.2
	Column %	99.31%	99.29%	99.41%
	Column % SE	0.08%	0.09%	0.21%
1- Pregnant Females Aged 12-44	Weighted Count	279,213	231,760	47,453
	Count SE	34,251.8	31,662.4	16,916.3
	Column %	0.69%	0.71%	0.59%
	Column % SE	0.08%	0.09%	0.21%

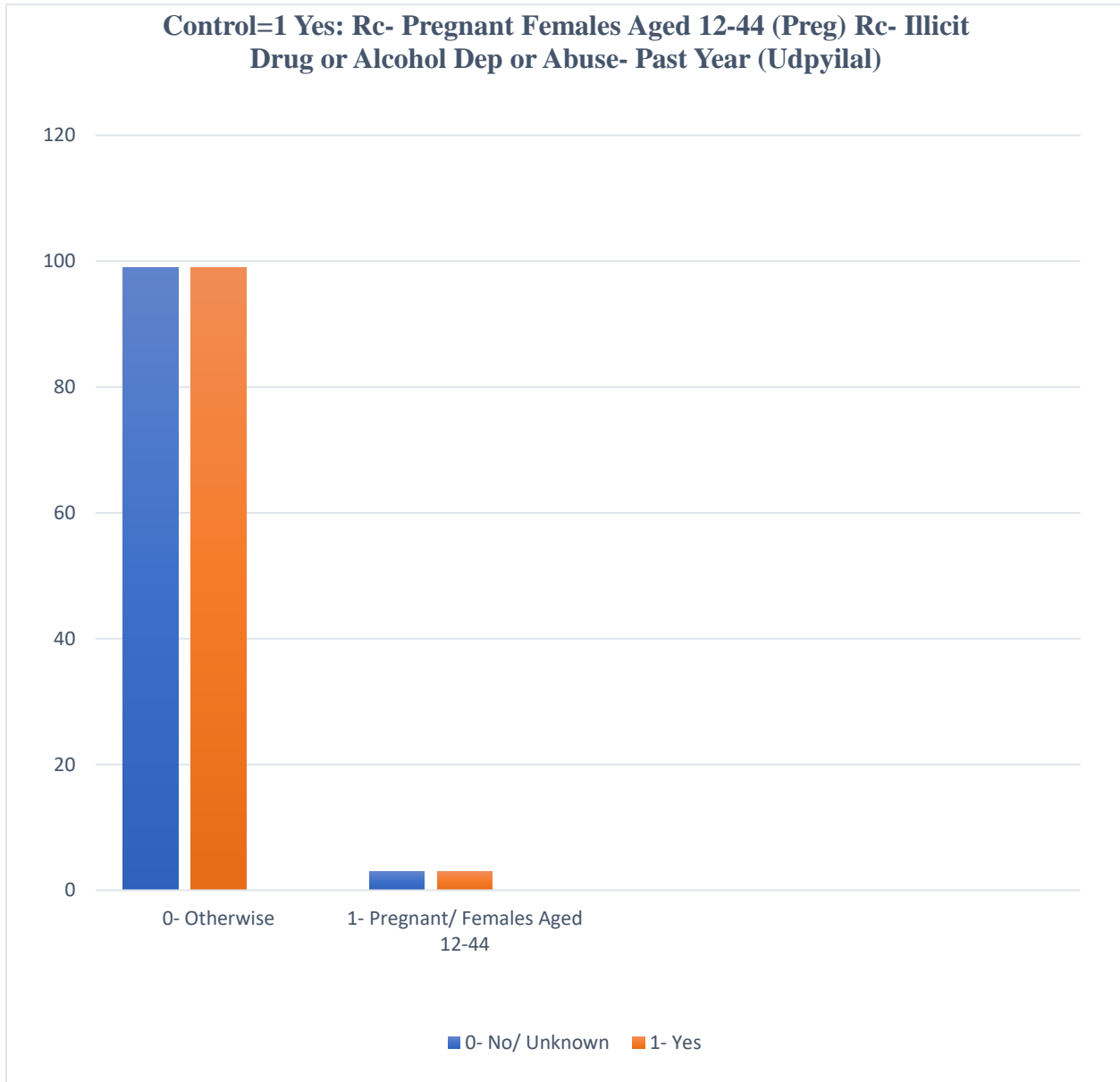
Adapted from “National Survey on Drug Use and Health 2018 (NSDUH-2018-DS0001)” by The U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, and Center for Behavioral Health Statistics and Quality, 2019, <https://datafiles.samhsa.gov/>

According to research, alcohol can be more detrimental to the mother and fetus than any other substances because the blood alcohol concentration (BAC) of the fetus has the capacity to be just as high as the mother of the child (Mountain Area Health Education Center [MAHEC], 2021). As a result, there are several birth defects that occur because of alcohol abuse or dependency. Research stated that there are approximately 19,600 babies who are born exposed to

alcohol each year (MAHEC, 2021). The following bar graphs indicate the statistical data for the number of pregnant women who abused illicit drugs or alcohol from ages 12-44, while the chart identified women who were arrested for breaking the law.

Figure 6

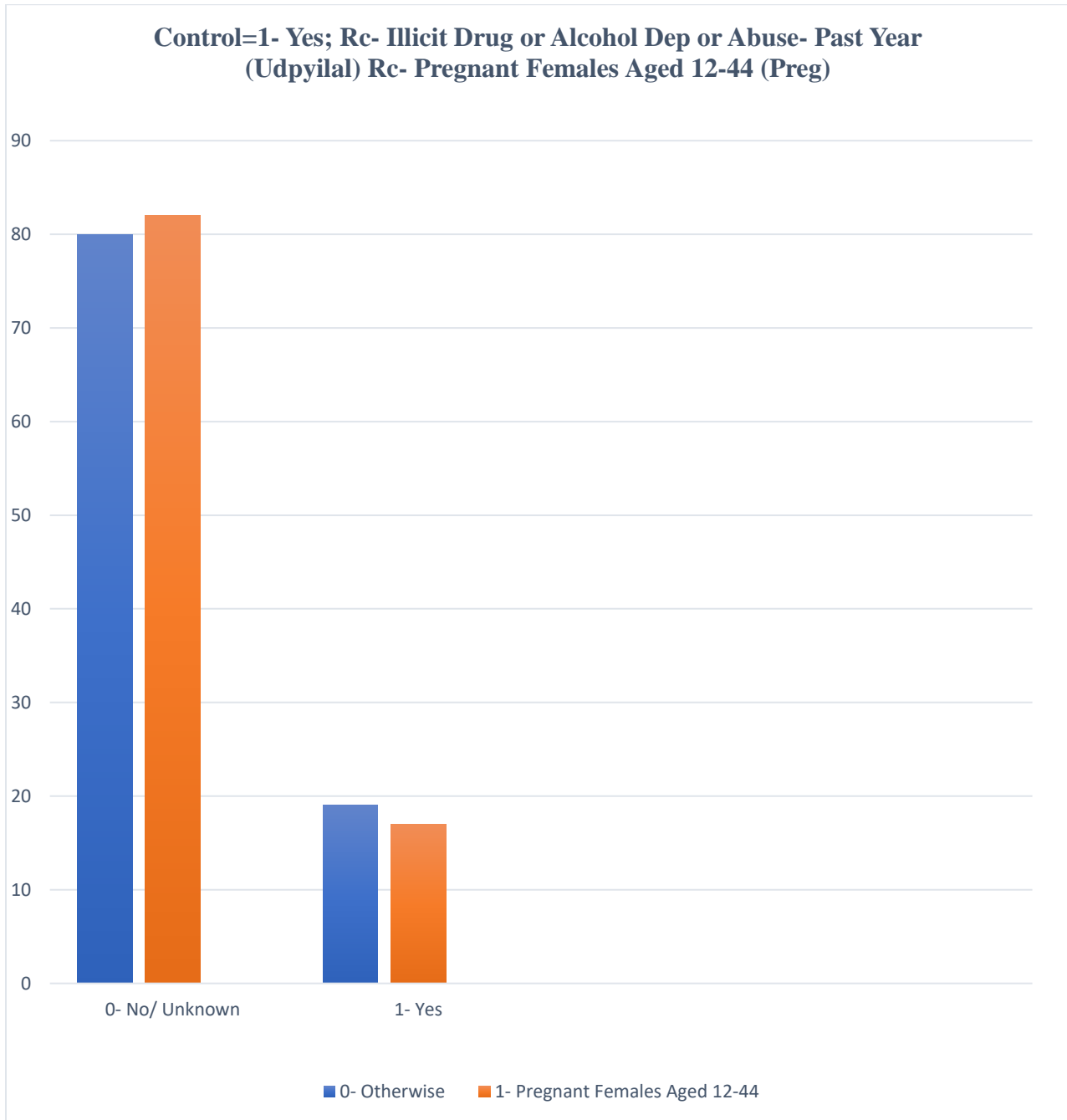
Pregnant Females Aged 12-44



Adapted from “National Survey on Drug Use and Health 2018 (NSDUH-2018-DS0001)” by The U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, and Center for Behavioral Health Statistics and Quality, 2019, <https://datafiles.samhsa.gov>

Figure 7

Illicit Drug or Alcohol Dependence or Abuse



Adapted from “National Survey on Drug Use and Health 2018 (NSDUH-2018-DS0001)” by The U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, and Center for Behavioral Health Statistics and Quality, 2019, <https://datafiles.samhsa.gov/>

Table 6***Pregnant Women Who Were Ever Arrested and Booked for Breaking the Law***

EVER ARRESTED AND BOOKED FOR BREAKING THE LAW: 1 – Yes		RC- ILLICIT DRUG AND ALCOHOL DEP OR ABUSE- PAST YEAR		
RC- Pregnant Females Aged 12-44		Total	0- No Unknown	1- Yes
Total	Weighted Count	273,753,043	253,515,437	20,237,605
	Count SE	1,824,763.6	1,802,715.7	444,670.0
	Column %	100.00%	100.00%	100.00%
	Column % SE	0.00%	0.00%	0.00%
0- Otherwise	Weighted Count	271,320,520	251,239,251	20,051,268
	Count SE	1,823,580.3	1,795,297.9	444,476.3
	Column %	99.11%	99.10%	99.23%
	Column % SE	0.04%	0.04%	0.15%
1- Pregnant Females Aged 12-44	Weighted Count	2,432,523	2,276,186	156,337
	Count SE	97,029.1	93,723.7	29,451.9
	Column %	0.89%	0.90%	0.77%
	Column % SE	0.04%	0.04%	0.15%

Adapted from “National Survey on Drug Use and Health 2018 (NSDUH-2018-DS0001)” by The U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, and Center for Behavioral Health Statistics and Quality, 2019, <https://datafiles.samhsa.gov/>

The NCBDDD (2021) identified alcohol usage in pregnant women between ages 18-44 in 2019 from all 50 states and the District of Columbia. However, the maternal drug use data was collected using information from the Healthcare Cost and Utilization Project (HCUP) of mothers of hospitalized infants containing Neonatal Abstinence Syndrome (NAS). According to Hirai et al. (2021), NAS is developed in infants who have been exposed to drugs during pregnancy. As a result, the percentage of drug exposed infants can help provide an estimate of who used drugs while pregnant. Thus, the following two T test analyses were conducted.

Table 7***Group Statistics of Strict and Lenient Laws on Drug Use in Pregnant Women***

Group Statistics					
	Strict and Lenient Laws	N	Mean	Std. Deviation	Std. Error Mean
Drug Use	Strict Laws	12	12.3167	15.14613	4.37231
	Lenient Laws	13	6.6462	5.08783	1.41111

Table 8***Independent Samples Test of Strict and Lenient Laws on Drug Use in Pregnant Women***

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Drug Use	Equal variances assumed	2.972	.098	1.276	23	.215	5.67051	4.44376	-3.52210	14.86313	
	Equal variances not assumed			1.234	13.279	.239	5.67051	4.59438	-4.23390	15.57493	

Table 9***Independent Samples Effect Sizes of Strict and Lenient Laws on Drug Use in Pregnant******Women***

Independent Samples Effect Sizes					
		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
Drug Use	Cohen's d	11.10051	.511	-.293	1.304
	Hedges' correction	11.47966	.494	-.283	1.261
	Glass's delta	5.08783	1.115	.197	1.997

a. The denominator used in estimating the effect sizes. Cohen's d uses the pooled standard deviation. Hedges' correction uses the pooled standard deviation, plus a correction factor. Glass's delta uses the sample standard deviation of the control group.

Table 10***Group Statistics of Maternal Alcohol Use***

Group Statistics					
	Strict and Lenient Laws	N	Mean	Std. Deviation	Std. Error Mean
Alcohol Use	Strict Laws	12	40.9667	13.82957	3.99225
	Lenient Laws	13	52.0231	1.77677	.49279

Table 11***Independent Samples Test of Maternal Alcohol Use***

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Alcohol Use	Equal variances assumed	6.086	.022	-2.862	23	.009	-11.05641	3.86299	-19.04762	-3.06520
	Equal variances not assumed			-2.749	11.335	.018	-11.05641	4.02255	-19.87813	-2.23469

Table 12***Independent Samples Effect Sizes of Maternal Alcohol Use***

Independent Samples Effect Sizes					
		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
Alcohol Use	Cohen's d	9.64976	-1.146	-1.986	-.284
	Hedges' correction	9.97935	-1.108	-1.920	-.275
	Glass's delta	1.77677	-6.223	-8.790	-3.634

a. The denominator used in estimating the effect sizes. Cohen's d uses the pooled standard deviation. Hedges' correction uses the pooled standard deviation, plus a correction factor. Glass's delta uses the sample standard deviation of the control group.

An independent sample T-test was conducted to compare strict and lenient law of each state for maternal drug and alcohol abusers. Strictness is comparative to laws that criminalize pregnant women who abuse substances. While lenient laws refer to those that offer treatment options such as prioritized treatment, targeted treatment programs, and drug treatment programs. The first T-test analyzed maternal drug use and indicated that there was no significant difference

in the scores for strict ($M= 12.3167$, $SD= 15.14613$) and lenient ($M= 6.6462$, $SD= 5.08783$) laws, conditions $t(23) = 1.276$, $p= 0.215$. However, the second test showed that there was a significant difference in the scores for strict ($M= 40.9667$, $SD= 13.82957$) and lenient ($M= 52.0231$; $SD= 1.77677$) laws, conditions $t(23) = -2.862$, $p=0.009$. Precisely, these results suggest that laws for alcohol use may be more lenient, while those for drug use are stricter. This discovery may come as a shock to some, given that drinking during pregnancy causes more birth defects than smoking or using illicit substances (MAHEC, 2021).

Policies that offer treatment options present opportunities to obtain useful resources essential to improving one's quality of life. Such resources include TANF, faith-based organizational support, housing, and family support (MAHEC, 2021). Also, these options are imperative since the fear of stigma is an enormous barrier for those seeking care (MAHEC, 2021). Although many states do not have a specific law that criminalize maternal substance abuser, many do have some form of consequence such as a requirement of notification or treatment options. Furthermore, fear of stigma can cause an expectant mother to make impulsive decisions and present negative outcomes such as lack of prenatal care and safety risks for both the mother and child.

State Policies and Consequences

Strict laws are present for states that might consider jail time as an appropriate means of punishment. However, lenient laws are identified when consequences are effective but less stringent. Although many states consider maternal substance abuse as child abuse or neglect, various treatment options exist per state. Over time, lawmakers enhance state laws to ensure safety for expectant mothers and their children. Some maternal substance abuse laws may suggest treatment programs for women of all social classes, whether on Medicaid or private

insurance. Research indicated that maternal substance abuse is neglect or child abuse in 23 states (Guttmacher Institute, 2021). However, three states believed that it was grounds for civil commitment, eight demand testing, 25 states required mandated reporting, in 17 states priority treatment is available, and 19 states have treatment programs designed for maternal substance abusers (Guttmacher Institute, 2021). In contrast, ten states do not allow maternal substance abusers to be discriminated against for receiving proper treatment (Guttmacher Institute, 2021).

Alabama implemented a Chemical Endangerment Law to ensure consequences for pregnant women who abuse drugs and alcohol (Murphy, 2014 as cited in Stone, 2015). As a result, Alabama can charge expectant mothers with criminal child abuse. In Arizona, the drug and alcohol-abusing mother could be charged with child abuse, but it is not depicted as a criminal charge. Other states require prioritized treatment, testing, and mandated reporting. The following tables compare maternal substance abuse laws in Tennessee, Georgia, and Louisiana and creates a typology of potential strict and lenient laws across the United States based on data collect from the Child Welfare website. Further information on maternal substance abuse laws and how to identify requirements and consequences that may be implemented throughout all 50 states and the District of Columbia can be found in Appendix F.

Table 13

Maternal Substance Abuse Laws in Tennessee, Georgia, and Louisiana

States	Codes	Legislature	Consequences
Georgia	Ann. Code § 15-11-2(56)	<ul style="list-style-type: none"> The term ‘prenatal abuse’ means exposure to chronic or severe use of alcohol or the unlawful use of any controlled substance that results in either of the following: Symptoms of withdrawal in a newborn or the presence of a controlled substance or a metabolite thereof in a newborn’s body, blood, urine, or meconium that is not the result of medical treatment. 	<ul style="list-style-type: none"> Priority treatment
Louisiana	Ch. Code Art. 610(G)	<ul style="list-style-type: none"> If there are symptoms of withdrawal in the newborn or other observable and harmful effects in his or her physical appearance or functioning that a physician has cause to believe are due to the chronic or severe use of alcohol by the mother during pregnancy or are the effects of fetal alcohol spectrum disorder, the physician shall issue a report in accordance with this article. 	<ul style="list-style-type: none"> Child abuse or neglect Mandated Reporting Drug Testing
Tennessee	Admin. Pol. & Proc. # 14.21 Tennessee Code § 39-13-107(c) <i>Expired July 2016</i>	<ul style="list-style-type: none"> The Department of Children’s Services shall intervene and respond timely to allegations involving drug-exposed children (DEC) by screening and assigning reports made to the child abuse hotline to child protection services based on the severity of or potential for physical, mental, or emotional harm to the child. The alleged child victim and/or mother had a positive drug screen at birth. Authorizes the “assault for the illegal use of a narcotic during pregnancy, if the child is born with addiction or harmed by the narcotic drug” (Soderberg, 2016, p. 308-307). 	<ul style="list-style-type: none"> Targeted program created Priority treatment Protected from discrimination in policy funded programs Criminalization according to the Fetal Assault Law

Note: Adapted from “Parental Substance Use as Child Abuse” by Child Welfare Information Gateway, 2020), <https://www.childwelfare.gov/topics/systemwide/laws-policies/state/>

Table 14

Strict Laws Versus Lenient Laws

States with Strict Laws (Criminalization)	States with Lenient Laws (Treatment)
<p><u>Chemical Endangerment Law</u>–Alabama & South Carolina</p> <p><u>Fetal Assault Law</u>–Tennessee (<i>expired 2016</i>)</p>	<p><u>Prioritized Treatment Program</u>–Alabama, Arizona, Arkansas, Delaware, Georgia, Illinois, Iowa, Kansas, Kentucky, Maine, Missouri, Oklahoma, Tennessee, Utah, West Virginia, and Wisconsin</p> <p><u>Drug Treatment Program</u>–District of Columbia and New Jersey</p> <p><u>Targeted Treatment Program</u>–Arkansas, California, Colorado, Connecticut, Florida, Illinois, Indiana, Kentucky, Maryland, Minnesota, Pennsylvania, South Carolina, Tennessee (<i>since expiration</i>), Vermont, Virginia, Washington, and Wisconsin</p>

Overall, the laws that influence criminalization versus those that encourage treatment all have one thing in common: the attempt to rectify maternal substance abuse issues and create consequences that will protect the mother and the unborn child. In doing this, it is imperative to understand the importance of treating the issue as a disease instead of a crime. According to the MAHEC (2021), prenatal drug and alcohol exposure can destroy brain cells in the fetus and mother during pregnancy which can contribute to birth defects. These changes in the brain are relative to why substance abuse is referred to as a disease (Leshner, 1997, as cited in Branch, 2011).

As a result, diseases should be treated through treatment programs such as the those previously mentioned in Table 14. The absence of such programs hinders states from providing needed services for addressing behavioral outcomes related to substance abuse. Research indicates that changes in the central nervous system of the brain are linked to behavioral changes (Leshner, 1997, as cited in Branch 2011). Behavioral changes can impact one’s decision about

abusing substances while pregnant as well as impairing one's judgment regarding safety. Hence, these choices have caused individuals to react impulsively due to fear of custody loss.

Nevertheless, the experiences of substance abuse professionals who have worked with maternal substance abusers assisted with proving why treatment should be used to address maternal substance abuse instead of criminalization.

Section 3: What are the experiences of professionals treating maternal substance abusers?

Qualitative Analysis

The nine semi-structured telephone interviews were analyzed using a thematic analysis. A thematic analysis helped identify similar themes and patterns reported by interview participants. Identifying these themes also helped identify strenuous and lenient laws. Although participants had similar ideas about maternal substance abuse, there were some legislative differences among the three states examined: Tennessee, Louisiana, and Georgia. Nevertheless, each state possessed different perspectives on how maternal substance abuse issues should be handled.

The interviews were between 1-1 ½ hours and were uploaded to Microsoft to be transcribed. The transcripts were then analyzed in three interview intervals. The researcher coded the data using a thematic analysis to identify potential categories and themes based on the information received in interviews. The questions were semi-structured to provide opportunities to ask additional questions that may arise during the interview process. Many of the participants recalled their experience with maternal substance abusers. For instance, two of the participants mentioned the following as their experience:

Participant 1: My overall experience with maternal substance abusers stems back probably 17 years. I worked at the local office for five years and all females who

were pregnant at that time were required to come and have an assessment done to determine if they were substance users. There was a screening tool that was used called Dash 10 to identify these users and if that person was determined to have a substance use problem while pregnant, then they would be referred to a treatment facility. (Participant 1, personal communication, March 10, 2021)

Participant 4: I have had extensive experience working with females that were pregnant. And uh, it has been proven that our program of substance abuse provides a lot of education and understanding for the females. It dictates how substance use can harm the unborn child. And learn skills on what to do. Sometimes they get the feeling that they want to drink or use drugs while they are pregnant, but our program gives them information on how they can work through those feelings and how they must do it. (Participant 4, personal communication, March 22, 2021)

In most cases, there were similarities among each participant's response. However, other themes could be identified from a state perspective, instead of an individual perspective. Nevertheless, themes are essential to identifying potential patterns in research. The following is a synopsis of themes identified throughout the interview process with mental health and substance abuse practitioners.

Theme #1: Mental Illness Behaviors that Influence Maternal Substance Abuse

Some participants identified mental illnesses that can affect one's behavior and the decision-making process when using substances while pregnant. According to Participant 1, it is common to encounter pregnant women in substance abuse counseling who also have mental health issues such as ADHD, anxiety, trauma, and depression (Participant 1, personal

communication, March 10, 2021). Further discussion with this participant also revealed that many of these women experience self-esteem and anger issues that might have influenced the decision-making process when determining whether to use drugs while pregnant (Participant 1, personal communication, March 10, 2021). Other participants identified common reasons for using such as self-medicating to cope with stressful situations and taking controlled medicines to alleviate mental health symptoms. The following are interviews correlating with those assumptions:

Participant 3: Most of the ladies that I saw had co-occurring disorders. Many mental health issues were due to depression and some bipolar, but mostly depression. I also noticed PTSD or post-traumatic stress. I would say there was a higher number of PTSD than depression. About 85% of the women that I worked with dealt with trauma. I know that number seems high. (Participant 3, personal communication, March 17, 2021)

Participant 5: I tend to believe that there are some underlying mental health challenges, and it can be as minor as anxiety or as high as depression and bipolar or even self-medication. (Participant 5, personal communication, March 23, 2021)

Criminalizing pregnant women who abuse substances is not allowed in Louisiana and Georgia. These states chose different routes of consequences such as deeming the act as child abuse and offering prioritized treatment. Although the Tennessee Fetal Assault Legislature expired in 2016, some Tennessee participants believed that some parts of the law still exist under different statutes. They insist that other avenues have been taken to implement such consequences. Tennessee participants were asked to provide information on how safety and

family relationships pertain to the Fetal Assault Law which is the law that was used to criminalize pregnant substance abusing women. Two of the participants stated:

Participant 2: Sometimes we would get to the hospital to apprehend a maternal substance abuser who had been reported and they would already be gone. They know safe havens like the fire department and hospitals. There used to be a law that allowed mothers to be dropped off at safe havens and avoid charges, but I am not sure if that still exists. (Participant 2, personal communication, March 15, 2021)

Participant 7: How criminalization affects family members will depend on the relationship of the family. Some families are codependent families, and some families abandon them after they do different stuff. I think if the family is not good for the person, they should not go back to that family. Sometimes, people are enablers to people on drugs and give them the money to use. Some family members might think it is good for pregnant women to be in jail so that they will be safe and away from street crime. (Participant 7, personal communication, April 23, 2021)

Overall these participants suggested that there were pros and cons to having the Fetal Assault Law in place. No matter what law was in place these women would still find ways to get themselves out of harm's way, even if that meant fleeing the state. Participant 2 implied that it was normal for women to flee to other states to avoid strenuous consequences of the law (Participant 2, personal communication, March 15, 2021). Therefore, it is essential that efficient forms of treatment are made available to help teach better ways of coping and learning healthier ways to get through difficult situations in life.

Theme #2: Efficient Forms of Treatment

Some of the rules and regulations implemented from state to state have been put in place to punish maternal substance-abusing mothers while others offer treatment programs that provide resources such as job placement and training. According to research, the DHHS has made changes by identifying and creating programs that offer maternal substance abuse treatment (Quinn, 2016). Some of participants identified resources that have been offered to maternal substance abusers in the past and today. One participant reported that Tennessee has treatment facilities that aim to specifically help pregnant substance abusers (Participant 2, personal communication, March 15, 2021).

Participant 2: We have three programs in Memphis that you can bring your kids to treatment with you. (Participant 2, personal communication, March 15, 2021)

When discussing job training and parenting, participants from Louisiana and Georgia stated:

Participant 4: We have parenting programs, lectures, a referral system, job placement, and parenting class. (Participant 4, personal communication, March 22, 2021)

Participant 6: I wrote a certificate that would help people achieve basic counseling goals such as peer counseling. All my former drug users never really learned English or Math. The certificate program was a good way for these drug users to obtain job training. (Participant 6, personal communication, April 21, 2021)

Louisiana participants reported that there are not many inpatient facilities designed specifically for pregnant women. Some of the facilities that exist will accept these women in their condition, while others might view pregnancy as a liability. Even though Tennessee was the

only state of the three interviewed to actual criminalize women for using substances while pregnant, they also offer different resources. Tennessee has many inpatient treatment facilities specifically for pregnant women who use drugs and alcohol. Some of the reports regarding this topic included but are not limited to the following:

Participant 2: Mothers were with their children during the day. They went back to the unit to feed their kids and change diapers when we were out of group. We taught them skills on how to be a mother and gave them the opportunity to see or learn how to do things while they were here. We even offered a parenting class where a lady came in twice a week to teach them mothering skills. (Participant 2, personal communication, March 15, 2021)

Participant 3: We had a gender specific program for inpatient treatment, about a year before I left and went to another program. I facilitated an intensive outpatient program for several years, but these gender specific programs sometimes included both men and women. (Participant 3, personal communication, March 17, 2021)

Participant 8: I know that Tennessee has places where women can go and say they want some help with their addiction and stay there until the baby is born. When you must go through treatment, they will also see if you need to have a mental assessment. Basically, if you are in a structured program, then you would still have to do the treatment recovery part of that program. (Participant 8, personal communication, May 13, 2021)

Theme #3: Strategies to Enhancing Maternal Substance Abuse Policies.

The aim to ensuring that maternal substance abusers are given the assistance necessary to becoming productive individuals in society is to make sure that there are laws that have common objectives. Strenuous policies have influenced many maternal substance abuser's abilities to make good decisions. In various cases, these women may not consider additional consequences that can occur from attempting to avoid criminalization. In hindsight, one must consider whether these harsh laws are doing more harm than good. Participants were asked to identify changes that should be made to maternal substance abuse laws to ensure efficiency in the future. Interview participants offered their thoughts and past experiences on the topic and made the following comments.

Participant 1: In my Parish they have something called the Act 389 diversion program. So, that program basically says that if you have a person who is a first-time criminal offender and they get in trouble for whatever, normally it is a drug charge, the court would have them come here and go through treatment. Then after they finished treatment and the therapist deems that this person is now in a recovery program, they will go back to the court and the court will review it. If that person stayed clean for a period of three years, then they are given an opportunity to have their record expunged. Now if a maternity diversion program were offered to a person who was caught for possession and child neglect based on the substance use, which would be beneficial to pregnant women who used drugs or alcohol. (Participant 1, personal communication, March 10, 2021)

Participant 4: The old policy in Louisiana stated that if a person was identified as having a substance problem and had a mental health problem, you do one before

you do the other, then you try to prioritize which one we are going to do first, but that thinking has changed. (Participant 4, personal communication, March 22, 2021).

Participant 3: Most substance abusers do not handle stress well and might attempt to cope by using substances. It would be good if we had policies that encouraged treatment that responded better to specific communities like those that dealt with the prison system and pregnant women. (Participant 3, personal communication, March 17, 2021)

Participant 1 made an additional statement about policy enhancement:

Participant 1: I have been involved in a lot of policy procedural things. I do believe that a positive is having direct access to services and it should not just be a federal block grant mandate. I think it should just be a treatment services mandate. I do not think that just because we get federal money, we should not offer priority. So, I think, uh, a legal policy that will be very influential is that when a person you know does relapsed or does have an issue that as a last resort, we would go with incarceration. Instead, we should offer them a residential treatment option prior to incarceration. I think they should not have to detox and not have to place pregnant women using in a jail cell. All they are going to do is sit in the jail cell and fanaticize about using when they get out. (Participant 1, personal communication, March 10, 2021)

It is essential that things start to change in policy and law first because without this change, little will transform in maternal substance abuse behavior. Maternal substance abuse has the potential to change and offer effective treatment to its constituents. It can also provide life

skills that will help maternal substance abusers become better people and parents. However, lawmakers must ensure that resources are available and affordable.

Theme #4: Levels of Accountability

Accountability is a crucial component to acquire since it aids in individual responsibility. When an individual takes the initiative to attend self-help groups, individual counseling, or intensive outpatient programs (IOP), it can show accountability. This is beneficial since it may signal that the individual wishes to achieve sobriety for themselves as well as the child's protection. Seeking therapy can also help a person remember the importance of obtaining sobriety while also providing them with the means to do it. Interview participants made the following statements on the topic:

Participant 1: Generally, people with alcohol abuse and addiction issues can benefit wholeheartedly from AA. Just the principles and the structure and the camaraderie alone are helpful. You have some individuals, particularly minorities such as African Americans and Hispanics who do not have the same level of comfort in going to some AA meetings in the South because a lot of those meetings are eclectic. It would be different if the program was not predicated or if it was not normalized, but it was normalized on white males and not to fit female minorities, so they are not going to be comfortable. A percentage of them will be, but a percentage of them will not be. And so, and then you have some that do not identify as an alcoholic, but they might have need to go to Narcotics Anonymous or NA. You also have some who would benefit from going to Celebrate Recovery. (Participant 1, personal communication, March 10, 2021)

Participant 3: *Those people that were in continuum care managed to stay clean. They did continuum care such as AA or NA and they were able to stay clean but those people that did not caused an increase in the relapse rate because of no accountability.* (Participant 3 personal communication, March 17, 2021)

Participant 9: *I reiterate to clients that the major turning point in recovery is this. It is in chapter 5, page 58 of the big AA book. It is called hard work and it says, "rarely have we seen a person fail." That one sentence is paramount to anybody; male or female, that is trying to learn how to live a lifestyle of recovery.* (Participant 9, personal communication, July 14, 2021)

Being accountable and agreeing to adhere to treatment services can be challenging for some individuals. In some cases, clients might be afraid of being judged and constantly having to consider the discrimination that comes along with using while pregnant. Substance abuse is a disease, and it may be difficult to quit using prematurely. In some cases, many pregnant drug and alcohol abusers might not know that they are pregnant at the time of use, but it is still important to advise the use of self-help groups and treatment programs to ensure accountability for inappropriate behavior.

Theme #5: Law Mandated Consequences

Maternal substance abuse laws are different among states. Regardless of those differences, there are many components that are the same such as treatment considerations. Louisiana considers maternal substance abuse as child abuse, while Georgia prioritizes treatment. Nevertheless, Louisiana, Georgia, and Tennessee offer similar forms of treatment. Since the expiration of the Tennessee Fetal Assault Law, the state has also considered treatment as a main option. Interviewees made the following suggestions about the topic:

Participant 1: *Most agencies in Louisiana that are block grant funded are required to provide services to pregnant females. Now you know that you are asking a threefold question, but I'll explain it to you this way. If a person needs to have treatment and they're pregnant then all our state funded facilities or all our facilities that receive block grant money from the federal government, they all offer treatment to pregnant females unless that female has a medical complication that is contraindicated, or unless they are going into the facility in the last trimester. So, if they're less than two months away from delivery, most facilities statewide or otherwise, are cautious about admitting them because of potential complications from delivery. Now as far as a facility that just specializes in pregnant females only, I do know that there was one in South Louisiana called Lolli Camp.* (Participant 1, personal communication, March 10, 2021)

Tennessee participants were asked about treatment for maternal substance abusers and thoughts about the Fetal Assault Law. Questions pertained to the interviewee's experience with the law, if any, and instances of how the law could still be unconsciously in effect.

Participant 2: *It may not be in writing, but if you go to the hospital and you test positive for a substance, they call DHS which is an active source of our program. The state started a program where women could bring their children into treatment with them so there wouldn't be an excuse for them not to come into treatment.* (Participant 2, personal communication, March 15, 2021)

Participant 7: *Well, they do offer treatment before they give birth because we have facilities in Tennessee for women, just pregnant women. We also have some*

facilities that only work with women that already have kids. (Participant 7, personal communication, April 23, 2021)

Participant 8: Yes, I believe that some of the substance abuse laws are effective. Some of these women had never had any prenatal care because they were afraid and knew that they had used and would be in trouble. Therefore, they would just rather not do it. Some of the women would not be honest about their use and would imply that they did not know why their baby was having seizures.

(Participant 8, personal communication, May 13, 2021)

Treatment is a major contributor to ensuring that a patient obtains the ability to make better decisions about how to cope with difficult situations. Those coping mechanisms are typically consistent with strategies that do not encourage the use of drugs and alcohol. However, it is also essential to be aware of specific treatment services that are needed by certain women. Every woman will not have the same needs, and this is something that lawmakers should be aware of when implementing laws for maternal substance abuse.

Theme #6: Strictness Versus Leniency

It is critical that maternal substance abusers obtain consequences that hold them accountable for their behavior. Sometimes being too strict can cause more rebellion and hesitation for one to follow certain laws. Nevertheless, stricter laws can have pros and cons. For example, some interviewees felt that criminalization was beneficial because it motivated women to perform better to ensure guardianship of their children. On the other hand, it was viewed negatively because it influenced some maternal substance abusers to flee the state to give birth to avoid negative outcomes. The following statements were made:

Participant 9: *Oh, I think maternal substance abuse laws need to be firm and concise. I think that we should be firm with these mothers and let them know that these are the consequences if you do certain things. I think that when these mothers go for prenatal care, they should be made aware of consequences, so that no one can say that they were not warned.* (Participant 9, personal communication, July 14, 2021)

Participant 5: *Ultimately, I would love to see a separate faction for mental health and criminal. So, in other words, there needs to be a stronger mental health stance such as attending inpatient for a certain amount of time. I think it should be mandatory by the state to make sure the patient detoxes properly instead of criminalizing these women. I would love to see that type of world.* (Participant 5, personal communication, March 23, 2021)

Participant 7: *I don't think that the law should be too lenient on them, but also, they should not be too strict. Sometimes being too strict can cause rebellion. For instance, if the law says that the state will automatically take your baby if you are abusing substances while pregnant, I think they should work with the person through a program. It would be good to implement programs that focus on providing skills to help them not use substances.* (Participant 7, personal communication, April 23, 2021)

Participant 2: *It can be tough for some maternal substance abusers to get their children back after they have been taken because of their use. In my experience, it is normally the child's lawyer who makes things so hard for the mother but of course it is their job. I also think that most of the time there is a stigma attached*

and lawmakers see the behavior and not what led the person to be like that.

(Participant 2, personal communication, March 15, 2021)

Lessons Learned

Although some states do not have laws that directly address maternal substance abuse, many of them do have consequences that convey a message that implies poor decision-making. However, there were not a lot of states that criminalized maternal substance abusers. Mandated reporting, prioritized treatment, and child abuse appeared to be common charges implemented in most states. Identifying consequences in various states helped to determine the correlation between maternal substance abuse laws and using a positivist approach. Nevertheless, it is essential that lawmakers continue working to find helpful ways of implementing more effective change through safer and productive lawmaking strategies.

Even though Louisiana, Tennessee, and Georgia each have different approaches on how to handle maternal substance abuse, several themes were obtained from the interview process. According to the Louisiana and Georgia interviewees, there are not many programs specifically for maternal substance abuse, but these women can still be accepted into regular substance abuse programs. However, Tennessee has several programs for maternal substance abusers which allow mothers to enter programs before giving birth or with their children if they decide to enter the program after they have given birth. Overall, they all offered treatment alternatives that may assist maternal substance abusers in making better decisions and becoming better citizens.

Chapter 5: Conclusion and Discussion

The purpose of this research is to promote consciousness about maternal substance abuse while also examining lenient and stringent legislation to achieve sustainable growth and demonstrate accountability. This research used a mixed-methods approach to collect quantitative data from the 2018 NSDUH and qualitative research by conducting nine semi-structured telephone interviews. Tennessee, Georgia, and Louisiana provide three different viewpoints on how maternal substance abuse is handled in their state. In addition, the researcher asked participants to identify treatment options and how those opinions can be more efficient with changes to specific laws.

Tennessee initially passed a law that permitted the state to criminalize pregnant women for drug and alcohol abuse (Angelotta & Appelbaum, 2017). However, state legislators voted against reinstating it and allowed it to expire instead (Schultz, 2016). Georgia proposed that maternal substance abuse should not be addressed through criminal consequences. Instead, this state suggested handling the issue by implementing additional resources to help substance-abusing pregnant women recover, while Louisiana views this child welfare issue as child abuse (Guttmacher Institute, 2021).

Existing problems were prevalent because many maternal substance abusers would flee to other states to give birth or hide their addiction to avoid severe legislative consequences. Therefore, positivism can be used for both quantitative and qualitative research. This approach suggests that one's insight of a specific topic reflects his or her human encounters (Hesse-Biber, 2016). Hence, the researcher used the following research questions to formulate the ideas in this research using a positivist approach.

RQ 1: What type of maternal substance abuse laws exist in each state?

RQ 2: Does the stringency of the law impact the number of women abusing drugs and alcohol while pregnant?

RQ 3: What are the experiences of professionals treating maternal substance abusers?

Discussion of Findings

Although each participant dealt with pregnant drug and alcohol abusers in various settings, they all had similar perspectives on what constituted a stringent law or accountability and how mental illness can influence behavior. Each of the six themes: mental illness behaviors that influence maternal substance abuse, efficient forms of treatment, strategies to enhancing maternal substance abuse policies, levels of accountability, law mandated consequences, and strictness versus leniency played a significant role in determining participant perspectives on maternal substance misuse. Statistical data collected from the NSDUH database along with themes provided a description of past, present, and future views.

The T test analyses identified the correlation between stringent and lenient laws for maternal substance abuse by creating a typology to compare both outcomes. While the interviews revealed the process and effectiveness of consequences in Tennessee, Louisiana, and Georgia. Overall, the T tests indicate what methods proved to be more effective while revealing that there were more lenient laws for alcohol use than for illicit drug use. Furthermore, the following information includes the findings of the first research question.

RQ 1: What type of maternal substance abuse laws exist in each state?

Most interviewees felt that criminalizing pregnant women for abusing substances is not effective. It was assumed that these women would result to using again once they were released from jail. Also having a charge on one's record could hinder job placement for the types of jobs

that they are able to obtain. During the interview process, participant 1 suggested devising a diversion program. The initial perception of implementing such a program was to give the individual an opportunity to expunge their record, avoiding stringent legal outcomes. Without these types of programs, many states might still be faced with the potential of having women fleeing to other states to avoid harsh consequences, stigma, and discrimination. Previous studies have shown that many states lack the resources for maternal substance abusers because they had no programs that catered specifically to necessities of maternal substance abusers (Paltrow, 2002, as cited in Stone, 2015).

RQ 2: Does the stringency of the law impact the number of women abusing drugs and alcohol while pregnant?

This study verified why many pregnant substance abusers avoid accountability through treatment. Georgia appeared to be invested in prioritized treatment and teaching coping skills to assist with dealing with substance abuse issues. Sometimes, maternal substance abusers might be required to go through drug treatment or education to obtain custody of their children. Aftercare can serve as a support system for the recovery process. It might also imply accountability because participation in these programs typically signifies that the individual is working hard to achieve their goals. An indicator of a good aftercare program can be depicted when one participates in a program addressing “the whole person,” enhancing abstinence and recovery by providing parenting and skills that address one’s mental and emotional health (Milligan et al., 2010). Implementing parenting and mental health counseling can also help lawmakers and maternal substance abusers find healthy ways of coping with substance abuse without criminalization. One participant stated:

Participant 5: *There was a baby born with marijuana in their system and the baby was taken from the hospital. The mother was required to do drug treatment classes to get her baby back.* (Participant 5, personal communication, March 23, 2021)

Participant 1: *But if you are female that is pregnant and identify or get assessed as having a substance use disorder, there is no waiting, and you get the first available bed. Females who were pregnant have been on a priority status for a long time, and even now it is still that way. If I find a female that has a substance use disorder, they get priority status and they go ahead of everybody else.* (Participant 1, personal communication, March 10, 2021)

Participant 4: *I say that it is specifically inpatient programs that have prioritized treatment set up because most of your inpatient facilities have a waiting list to come into treatment, so by prioritizing the pregnant females, they go to the top of the list.* (Participant 4, personal communication, March 22, 2021)

Nevertheless, Tennessee had several resources for pregnant women who used drugs and alcohol. They had facilities that were specifically for these women. It appeared that maternal substance abusers were given the opportunity to learn skills necessary to effectively care for themselves as well as their newborn child. It is essential that these women are equipped with the necessities to be self-efficient and accountable.

RQ 3: What are the experiences of professionals treating maternal substance abusers?

Specific laws can influence the decision-making process and cause maternal substance abusers to make unwise decisions. In the moment, the expectant mother might not consider future outcomes. It is possible that the focus is ensuring that she does not face any legal issues and avoids jail time. One must consider the difference in running from the problem versus

resolving it. Several participants shared their views on how temporary fixes only make things worse. Some interview participants believed that criminalization would be a good option because it might encourage maternal substance abusers to think about their actions. While other participants felt that it just gave them time to think about using until they were released. However, providing treatment for these issues would give these women alternative options.

Implications

Motivation is an essential component to encouraging treatment and suggests that one must have a desire to enhance their quality of life. Maslow's Hierarchy of Needs mentioned in chapter 2, suggests that everyone has basic needs and at some point, they will try to get those needs met. For instance, abusing substances may be viewed as a need to maternal substance abusers. This study identified how motivation and accountability can be linked to the concepts in Maslow's Hierarchy of Needs. When comparing, the interview responses and statistical results to Maslow's theory, it was discovered that many mother's needs go unmet causing them to make poor choices about their physiological and safety needs. Using substances while pregnant is an indicator of poor decision-making which can put both mother and child in a compromising position.

The basis of the results of the quantitative and qualitative data analyzed were relative to a positivist approach and those results correlate with the research questions. Quantitative research was collected by conducting T test analyses utilizing data from the NCBDD and from the 2018 NSDUH database using cross-tabulation. These components assisted in understanding the relationship between pregnant women who were arrested for breaking the law and using illicit drugs and alcohol. The women who were interviewed in these categories were between the ages of 12-44. The results indicated that there was a significant relationship between pregnant women

aged 12-44 and being arrested for breaking the law. However, the relationship between drugs and alcohol and pregnant women had no significance. These statistical findings also provided the typical age group in which this problem is found, which can aid in identifying how to deal with it more effectively.

The qualitative data collected consisted of nine semi-structured telephone interviews with participants from Tennessee, Louisiana, and Georgia. Each participant obtained several years of experience working as mental health or substance abuse practitioners. This research was consistent with a positivist approach which is applicable for both quantitative and qualitative research. Interviews were transcribed in intervals of three and were later analyzed using a thematic approach. There were six different themes:

- Mental illness behaviors that influence maternal substance abuse
- Efficient forms of treatment
- Strategies to enhancing maternal substance abuse policies.
- Levels of accountability
- Law mandated consequences
- Strictness versus leniency

Each theme identified components addressed in the interview which are consistent with the research questions used to conduct this study. They also suggest what things can be done in the future to help improve policy. Data collected from participants enhances one's understanding of what influences one's thoughts on using substances and decisions to avoid measures that can encourage accountability.

Limitations and Recommendations

The population of maternal substance abuse identifies the correlation of change and behavior in the law. Behavior caused these women to make bad decisions about prenatal care and substance abuse treatment based on the fear of being arrested. Lawmakers did not see the type of change in behavior that they were hoping to see. The law was designed to decrease maternal substance abuse and hopefully motivate this population to seek treatment for their addictions. There was no direct data obtained about how many women were arrested because of the Fetal Assault Law in Tennessee. Further research is needed to identify what lawmakers plan to do to improve data collection methods. Collectively, the adoption of this law also impacted the confidence from the community and the medical sector (Lollar, 2017).

Nevertheless, Tennessee argues that the primary reason for creating such a bill was to encourage expecting mothers who abused drugs and alcohol to seek treatment. This tactic did not work, and many of the women avoided treatment, thinking that knowledge of their condition would cause further issues resulting in an arrest. It appears that the overall goal was not to see these women imprisoned and to make some changes in the bill instead of eliminating it. According to research, “The UN Special Rapporteur on the Right to Health, requested the suspension of criminal laws stating various forms of conduct during pregnancy. These restrictions could limit human dignity by restricting the freedoms to which individuals have the right to health” (Amnesty International, 2016, p. 2). Another issue is that pregnant women pose a liability for most rehabilitation facilities causing many women to get rejected for services. Not to mention, drug and alcohol addicted babies come with an unreasonable price tag for most states.

Not only was the Tennessee Fetal Assault Law rendered ineffective legislature for punishing maternal substance abusers, but the state also failed to collect data causally related to

the law (Guttmacher Institute, 2021). Nevertheless, data from studies are available about the state's prosecutions from 2014-2015, the state released the results of a survey of the District Attorney General's statement that there were 28 arrests made across Tennessee for prosecutions (Amnesty International, 2016). Outcomes of putting this law in place included avoiding prenatal care, abortions, avoiding substance abuse treatment, and moving to other states to give birth.

The hope that this law would encourage mothers struggling with maternal substance abuse failed, and several insurance companies refused to pay for the services. Treatment programs that will accept this demographic of women are too far to access proper treatment. As a result, Tennessee should have implemented programs that would be in closer proximity and areas where the issue exists the most. Criminalizing pregnant women for abusing substances had a tremendous impact on women's treatment due to poverty, inadequate healthcare, and racial discrimination (Amnesty International, 2016). Still, Tennessee has several treatment options that are accommodating to pregnant women. Implementing such facilities is helpful for decreasing the likelihood of labeling this population as a liability.

In some states, maternal substance abusers who are charged with child abuse or neglect are placed on the state's central registry (Child Welfare, 2020). These types of consequences can create issues for individuals seeking employment in fields that involve children. Specific laws may also have several disadvantages because they can cause dishonesty by causing a failure to comply with appropriate prenatal care for fear of being prosecuted. For instance, stigmatization, prejudice, and fear of punishment provide an obstacle for efficient healthcare causing potential health risk for both the mother and the fetus (Stone, 2015). Previous research suggests that strict laws influence poverty-stricken women of color more often because many of them are dependent

on federal resources (Stone, 2015). Information collected from interview participants verified this information.

Participant 1: Yeah, but if I am not a black female and I go in court, then the patience is different. And the main reason is usually because minorities do not understand or do not have the resources to pay for legal representation on an appropriate level, and they get stuck with public defenders who are overworked and underpaid. They try quick to fast track whatever the situation is so that they can keep the caseload moving. I do know a lot of white females who can afford better resources and pay for legal representation at a higher level and the consequences are going to be a lot more neutralized inside the courtroom. (Participant 1, personal communication, March 10, 2021)

Participant 6: I do think that court decisions are more criminalized for women of color. Some of them do not get to go to drug court, and it is assumed that those drug users get what they deserve. (Participant 6, personal communication, April 21, 2021)

Further Research

Maternal substance abuse can cause various risks for both the unborn child and the mother. Additional research is needed to create more awareness on the topic, aid in finding strategies for prevention, and implementing ways to ensure that individuals are given an opportunity to change through treatment and rehabilitation. Lawmakers should determine if different consequences should be considered for mothers who abused substances but were unaware of their pregnancy at the time. More research is also necessary to

examine improvements following the expansion of facilities for pregnant women who abuse substances.

Furthermore, states should explore developing specific programs to assist women in gaining the tools they need to stay sober during and after pregnancy. Since, there are several states that do not have maternal substance abuse specific programs, further research is needed to determine how to create those programs using grants. Hopefully, with time, the policies, and laws as we know it will change and evolve into something that will potentially help those who struggle with maternal substance abuse. As we search for more ways to protect society and the fetuses that are in danger, we must also find unbiased ways to protect human rights.

Conclusion

Research shows that “among 177,876 unique deliveries, 4,154 (2.3%) were to women with evidence of Opioid Use Disorder (OUD) in the year before delivery, who experienced 242 total opioid-related overdose events (231 non-fatal, 11 fatal) in the year before or after delivery” (Schiff et al., 2018, p. 466). These findings help lawmakers understand the significance of ensuring that mothers struggling with drug and alcohol abuse issues have healthy and productive outcomes through proper treatment and legislation. Tennessee argued that the purpose of criminalizing pregnant women was to encourage them to avoid substance abuse during pregnancy. However, it exacerbated the problem by instilling fear in these women, leading them to conceal their drug abuse and relocate to other states to give birth (Stone, 2015).

Before this law existed, expecting mothers abused drugs and alcohol and avoided criminalization. After the law, these women still obtained the same behavior but indicated issues displaying an inability to obtain honesty about negative behavior and refusal to seek proper prenatal care due to fear of being arrested. Some Tennessee representatives implied that these

additional matters had developed because of the bill. It appears that the state did not think about long-term problems that formed from creating such a law. This discretion caused many limitations and barriers such as healthcare and safety for the addicted mother and the unborn child.

However, Louisiana considers maternal substance abuse as child abuse and requires mandated reporting from its constituents. Georgia has prioritized treatment policies which provides many opportunities to implement accountability and healthier alternatives towards positive change. Nevertheless, Louisiana and Georgia do not obtain enough treatment facilities specifically for pregnant women. In fact, some interview participants from these states believed that implementing more facilities for pregnant women and creating diversion programs would help move the future of maternal substance abuse in a more positive direction.

Since Tennessee terminated the Fetal Assault Law, the state has since developed effective treatment options that allowed maternal substance abusers to learn skills essential to having a productive life. Although, the bill presented several limitations, that did not stop lawmakers from implementing strategies that will be helpful such as prioritized treatment, mandated reporting, and protection from discrimination in policy funded program, and targeted programs created. Maternal substance abuse issues existed well before the law, but more problems developed because of it. Yet, mothers who received therapy had better results since it allowed them to gain prenatal care and life skills to care for themselves and the unborn child. Expectant mothers also received shelter, contributing to a reduction in impulsive behavior relative to demographic changes. Nevertheless, lawmakers must ensure that maternal substance abuse decreases, and that no violation of rights exists.

References

- Angelotta, C. & Appelbaum, P.S. (2017). Criminal charges for child harm from substance use in pregnancy. *Journal of the American Academy of Psychiatry and the Law*, 45(2), 193-203.
- Angelotta, C., Weiss, C.J., Angelotta, J.W., & Friedman, R.A. (2016). A moral or medical problem? The relationship between legal penalties and treatment practices for opioid use disorders in pregnant women. *Women's Health Issues Journal*, 26(6), 595-601.
- Babakhanlou, R., & Beattie, T. (2019). Child abuse. *InnovAiT*, 12(4), 180–187.
- Best, D., Day, E., McCarthy, T., Darlington, I. & Pinchbeck, K. (2008). The Hierarchy of Needs and care planning in addiction services: What Maslow can tell us about addressing competing priorities? *Addiction Research & Theory*, 16(4), 305-307.
- Bhuvanewar, C.G., Chang, G., Epstein, L.A., & Stern, T.A. (2007). Alcohol use during pregnancy: Prevalence and impact. *The Primary Care Companion to the Journal of Clinical Psychiatry*, 9(6), 455–460.
- Birnbaum, H. G., White, A. G., Schiller, M., Waldman, T., Cleveland, J. M., & Roland, C. L. (2011). Societal Costs of Prescription Opioid Abuse, Dependence, and Misuse in the United States. *Pain Medicine*, 12(4), 657–667.
- Blehar, M. C., Spong, C., Grady, C., Goldkind, S. F., Sahin, L., & Clayton, J. A. (2013). Enrolling pregnant women: issues in clinical research. *Women's Health Issues: Official Publication of the Jacobs Institute of Women's Health*, 23(1), 39–45.
- Branch M. N. (2011). Drug addiction. Is it a disease or is it based on choice? A review of Gene Heyman's *Addiction: A disorder of choice*. *Journal of the Experimental Analysis of Behavior*, 95(2), 263–267. <https://doi.org/10.1901/jeab.2011.95-263>
- Buddy, T. (2020, March 19). An overview of substance use. *Very Well Mind*. Retrieved on

- May 20, 2020, from <https://www.verywellmind.com/substance-use-4014640>.
- Burns, L., Coleman-Cowger, V.H., & Breen, C. (2016). Managing maternal substance use in the perinatal period: Current concerns and treatment approaches in the United States and Australia. *Substance Abuse: Research and Treatment*, 10(1), 55-61.
- Canfield, M., Radcliffe, P., Marlow, S., Boreham, M., & Gilchrist, G. (2017). Maternal substance Use and child protection: a rapid evidence assessment of factors associated with loss of Childcare. *Child Abuse and Neglect Journal*, 70, 11-27.
- Center for Behavioral Health Statistics and Quality. (2019). 2018 National Survey on Drug Use and Health Public Use File Codebook, Substance Abuse and Mental Health Services Administration, Rockville, MD.
- Center for Substance Abuse Treatment. (2000a). *Substance abuse treatment for persons with child abuse and neglect issues*. Substance Abuse and Mental Health Services Administration. <https://www.ncbi.nlm.nih.gov/books/NBK64892/>.
- Center for Substance Abuse Treatment. (2000b). *Integrating substance abuse treatment and vocational services*. Substance Abuse and Mental Health Services Administration. <https://www.ncbi.nlm.nih.gov/books/NBK64279/>.
- Center for Substance Abuse Treatment. (2009). *Substance abuse treatment: Addressing the specific needs of women*. Substance Abuse and Mental Health Services Administration. <https://www.ncbi.nlm.nih.gov/books/NBK83240/>.
- Chang, G. (2001). Alcohol-screening instruments for pregnant women. *Alcohol Research and Health*, 25(3), 204-209.
- Child Welfare Information Gateway. (2020). Parental substance use as child abuse. Washington, DC: U.S. Department of Health and Human Services, Children's Bureau.

- Committee of Obstetric Practice. (2011). Moderate caffeine consumption during pregnancy. *The American College of Obstetricians and Gynecologists Women's Health Care Physicians*, 462, 1-2.
- Comprehensive Addiction and Recovery Act of 2016, 42 U.S.C. §§ 201 (2016).
- Cowell, A.J, Bray, J. W., & Hinde, J.M. (2012). The Cost of Screening and Brief Intervention in Employee Assistance Programs. *The Journal of Behavioral Health Services & Research*, 39(1), 55-67.
- Déry, J., Ruiz, A., Routhier, F., Gagnon, M.P., Côté, A., Ait-Kadi, D., Bélanger, V., Deslauriers, S., & Lanontagne, M.E. (2019). Patient prioritization tools and their effectiveness in non-emergency healthcare services: a systematic review protocol. *Systematic Reviews*, 8(78), 1-7.
- DeSilva, M., Munoz, F. M., Mcmillan, M., Kawai, A. T., Marshall, H., Macartney, K. K., Joshi, J., Oneko, M., Rose, A. E., Dolk, H., Trotta, F., Spiegel, H., Tomczyk, S., Shrestha, A., Kochhar, S., Kharbanda, E. O., & Brighton Collaboration Congenital Anomalies Working Group. (2016). Congenital anomalies: Case definition and guidelines for data collection, analysis, and presentation of immunization safety data. *Vaccine*, 34(49), 6015–6026.
- Economidoy, E., Klimi, A., & Vivilaki, V.G. (2012). Caring for substance abuse pregnant women: The role of the midwife. *Health Science Journal*, 6(1), 161-169.
- Forray, A. (2016). Substance use during pregnancy. *F1000 Research*, 13(5),1-9.
- Fossey, E., Harvey, C., Mcdermott, F., & Davidson, L. (2002). Understanding and Evaluating Qualitative Research. *Australian & New Zealand Journal of Psychiatry*, 36(6), 717–732.
- Frechtel, P., & Copello, E. (2007). Patterns of nonresponse for key questions in NSDUH and

- implications for imputation. In Proceedings of the 2007 Joint Statistical Meetings, American Statistical Association, Survey Research Methods Section, Salt Lake City, UT (pp. 3457-3464). Alexandria, VA: American Statistical Association.
- Galderisi, S., Heinz, A., Kastrup, M., Beezhold, J., & Sartorius, N. (2015). Toward a new definition of mental health. *World psychiatry: official journal of the World Psychiatric Association (WPA)*, 14(2), 231–233.
- Gortner, H., Nichols, K.L., & Ball, C. (2007). *Organization theory: A public and nonprofit perspective*. Belmont, CA: Thomas Higher Education.
- Gostin, L.O. (2000). *Promoting health: Intervention strategies from social and behavioral research*. National Academies Press. Retrieved on April 2, 2021, from <https://www.ncbi.nlm.nih.gov/books/NBK222835/>.
- Guttmacher Institute. (2021, April 1). Substance use during pregnancy. Retrieved on April 6, 2021 from <https://www.guttmacher.org/state-policy/explore/substance-use-during-pregnancy>.
- Halek, M., Holle, D. & Bartholomeyczik, S. (2017). Development and evaluation of the content validity, practicability, and feasibility of the innovative dementia-oriented assessment system for challenging behavior in residents with dementia. *BMC Health Serv Res* 17(554),1-26.
- Haug, N. A., Ellison, M.D., & McCaul, M. (2014). Substance abuse treatment services for Pregnant women: Psychosocial and behavioral approaches. *Obstetrics and Gynecology Clinics of North America*, 41(2), 267-296.
- Healthcare Cost and Utilization Project (HCUP). (2021, April). *HCUP fast stats- Map of*

neonatal abstinence syndrome (NAS) among newborn hospitalizations. Agency for Healthcare Research and Quality. <https://www.hcup-us.ahrq.gov/faststats/NASMAP?setting=IP>.

Herzberg, D., Guarino, H., Mateu-Gelabert, P., & Bennett, A.S. (2016). Recurring epidemics of pharmaceutical drug abuse in America: Time for an all-drug strategy. *American Journal of Public Health, 106*(3), 408-410.

Hesse-Biber, S.N. (2016). *The Practice of Qualitative Research. Engaging Students in the Research Process* (3rd ed.). Thousand Oaks, CA: Sage.

Hirai, A.H., Ko, J.Y., Owens, P.L., Stocks, C., & Patrick, S.W. (2021). Neonatal abstinence syndrome and maternal opioid-related diagnoses in the U.S., 2010-2017. *The Journal of the American Medical Association, 325*(2), 146-155.

Hser, Y., Lanza, H.I., Li, L., Kahn, E., Evans, E. & Schulte, M. (2015). Maternal mental health and children's internalizing and externalizing behaviors: Beyond maternal substance use disorders. *Journal of Children and Family Studies, 24*(3), 638-648.

Humphreys, K., Wing, S., McCarty, D., Chappel, J., Gallant, L., Haberle, B., Horvath, A.T., Kaskutas, L.A., Kirk, T., Kivlahan, D., Laudet, A., McCrady, B.S., McLellan, A.T., Morgenstern, J., Townsend, M., & Weiss, R. (2004). Self-Help Organizations for Alcohol and Drug Problems: Toward Evidence-Based Practice and Policy. *Journal of Substance Abuse Treatment, 26*(3), 151-158.

Jarlenski, M. Hogan, C., Bogen, D.L., Chang, J.C., Bodnar, L.M., & Nostrand, E.V. (2017). Characterization of US state laws requiring health care provider reporting of perinatal substance use. *Women Health Issues, 27*(3), 264-270.

Kang, C., Huh, S., Cho, S., & Auh, EY (2015). Turnover and Retention in Nonprofit

- Employment: The Korean College Graduates' Experience. *Nonprofit and Voluntary Sector Quarterly*, 44(4), 641-664.
- Kenrick, D. T., Griskevicius, V., Neuberg, S. L., & Schaller, M. (2010). Renovating the pyramid of needs: Contemporary extensions built upon ancient foundations. *Perspectives on Psychological Science: A Journal of the Association for Psychological Science*, 5(3), 292–314.
- Krans, E.E. & Patrick, S.W. (2016). Opioid use disorder in pregnancy: Health policy and practice in the midst of an epidemic. *Obstetrics & Gynecology*, 128(1), 4–10.
- Kranzler, H. R., & Li, T. K. (2008). What is addiction? *Alcohol Research & Health: The Journal of the National Institute on Alcohol Abuse and Alcoholism*, 31(2), 93–95.
- Koops, W. & Kessel, F. (2017) Developmental psychology without positivistic pretensions: An introduction to the special issue on historical developmental psychology. *European Journal of Developmental Psychology*, 14(6), 629-646.
- Lester, B.M., Andreozzi, A., & Appiah, A. (2004). Substance use during pregnancy: Time for policy to catch up with research. *Harm Reduction Journal*, 1(5), 1-44.
- Linden, P.M. (1995). Drug addiction during pregnancy: A call for increased social responsibility. *Journal of Gender and the Law*, 4(105), 105-139.
- Lipari, R. N., Park-Lee, E., and Van Horn, S. (2016). America's need for and the receipt of substance use in treatment in 2015. The CBHSQ Report: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Rockville, MD.
- Lollar, C.E. (2017). Criminalizing pregnancy. *Indiana Law Journal*, 92(3), 947-1003. Retrieved on November 13, 2020, from <https://www.repository.law.indiana.edu/ilj/vol92/iss3/3>.

- Maslow, A. (2012). The theory of human motivation. In J.M. Shafritz and A.C. Hyde (Eds.), *Classics of Public Administration* (7th ed., pp. 114-121). Boston, MA: Wadsworth. (Original work published 1943).
- Mauro, T. (2007). The many victims of substance abuse. *Psychiatry (Edgmont)*, 4(9), 43–51.
- McGrath, S. & Whitty, J. (2018). Accountability and responsibility defined. *International Journal of Managing Projects in Business*, 11(3), 687-707.
- McLellan, A.T. (2017). Substance misuse and substance use disorders: Why do they matter in healthcare? *Transaction of the American Clinical and Climatological Association*. 128, 112–130.
- Merrick, E., Hodgkin, D., Horgan, C., Quinn, A. (2015). Employee Assistance Programs in Private Health Plans: What Do They Offer? *Psychiatric Services*, 66(3), 220.
- Metz, V., Köchl, B., & Fischer, G. (2012). Should pregnant women with substance use disorders be managed differently? *Neuropsychiatry*, 2(1), 29–41.
- Milligan, K., Niccols, A., Sword, W., Thabane, L. (2010). Maternal substance use and integrated treatment programs for women with substance abuse issues and their children: A meta-analysis. *Substance Abuse Treatment, Prevention, and Policy*, 5(21), 1-14.
- Miranda, L., Dixon, V., & Reyes, C. (2015, September 30). How states handle drug use during pregnancy. *ProPublica: Journalism in the Public Interest*. Retrieved on January 13, 2020, from <https://www.guttmacher.org/state-policy/explore/substance-use-during-pregnancy>.
- Mountain Area Health Education Center. (2021, May 5-7). *A year like no other: Trends &*

- impact on perinatal and maternal treatment.* The 2021 Women’s Recovery Conference- Rising Together through Trauma, Grief and Loss. Asheville, North Carolina. <https://mahec.net>.
- Nathan, P.E., Wallace, J., Zweben, J., and Horvath, A.T. (2018, September). *Understanding alcohol use disorders and their treatment.* American Psychological Association. <https://www.apa.org/topics/substance-use-abuse-addiction/alcohol-disorders>.
- National Center on Birth Defects and Developmental Disabilities (NCBDDD). (2021, May 14). *State-level estimates of alcohol use among women—2019.* Center for Disease Control and Prevention (CDC). <https://www.cdc.gov/ncbddd/fasd//data-maps-2019.html>.
- National Drug Intelligence Center (2011). National Drug Threat Assessment. Washington, DC: United States Department of Justice. Retrieved on September 17, 2020, from www.justice.gov/archive/ndic/pubs44/44849/44849p.pdf.
- National Survey on Drug Use and Health. (n.d.). *Who uses NSDUH data?* <https://nsduhweb.rti.org/respweb/datause.html>.
- Niccols, A., Milligan, K., Sword, W., Thabane, L., Henderson, J., & Smith, A. (2012). Integrated programs for mothers with substance abuse issues: A systematic review of studies reporting on parenting outcomes. *Harm reduction journal*, 9(1), 14-24.
- National Institute on Drug Abuse. (2020, June 25). The Science of Drug Use and Addiction: The Basics. Retrieved on August 6, 2021, from <https://www.drugabuse.gov/publications/media-guide/science-drug-use-addiction-basics>.
- Normand, J., Lempert, R.O., & O’Brien, C.P. (1994). *Under the Influence? Drugs and the American Work Force.* Washington, DC: National Academies Press.

- Otiashvili, D., Kirtadze, I., O'Grady, K.E., Zule, W., Krupitsky, E., Wechsberg, W.M., & Jones, H.E. (2013). Access to treatment for substance-using women in the Republic of Georgia: Socio-cultural and structural barriers, *International Journal of Drug Policy*, 24(6), 566-572.
- Pajulo, M., Suchman, N., Kalland, M., & Mayes, L. (2006). Enhancing the effectiveness of residential treatment for substance-abusing pregnant and parenting women: Focus on maternal reflective functioning and the mother-child relationship. *Infant Mental Health Journal*, 27(5), 448-465.
- Qualtrics. (n.d.). Cross-tabulation analysis: A researcher's guide.
<https://www.qualtrics.com/experience-management/research/cross-tabulation/>.
- Quinn, M. (2016). Addicted and Pregnant: How states deal with drug problems when you're expecting. Retrieved on March 19, 2020, from <https://www.governing.com/topics/health-human-services/gov-pregnant-drug-abuse.html>.
- Rewire News (2019, February 6). Mississippi bill regarding the chemical endangerment of a fetus (SB 2113). Retrieved on July 7, 2021, from <https://rewirenewsgroup.com/legislative-tracker/law/mississippi-bill-regarding-the-chemical-endangerment-of-a-fetus-sb-2113/>.
- Rewire News (2018, December 6). Tennessee fetal assault law (SB 1391). Retrieved on March 19, 2020, from <https://rewire.news/legislative-tracker/law/tennessee-pregnancy-criminalization-law-sb-1391/>.
- Roberts, S.C.M., Thomas, S., Treffers, R., & Drabble, L. (2017). Forty years of state alcohol and pregnancy policies in the USA: Best practices for public health or efforts to restrict women's reproductive rights? *Alcohol and Alcoholism*, 52(6), 715–721.

- Roman, P.M. & Blum, T.C. (2002). The workplace and alcohol problem prevention. *Alcohol Research & Health*, 26(1), 49-57.
- Russell, M. (1994). New assessment tools for risk drinking during pregnancy: T-ACE, TWEAK, and others. *Alcohol Health and Research World Journal*, 18(1), 55-61.
- Ryan, J.L. & Rosa, V.R. (2020). Healthcare cost associations of patients who use illicit drugs in Florida: a retrospective analysis. *Substance Abuse Treatment, Prevention, and Policy*, 15(73), 1-8.
- Schiff, D.M., Nielsen, T., Terplan, M., Hood, M., Berson, D., Diop, H., Bharel, M., Wilens, T.E., LaRochelle, M. Walley, A.Y., & Land, T. (2018). Fatal and non-fatal overdose among pregnant and postpartum women in Massachusetts. *Obstetrics & Gynecology*, 132(2), 466–474.
- Schultz, N.L. (2016, March 14). Tennessee’s war on women is sending new mothers to jail. *Mother Jones*. Retrieved July 1, 2021, from <https://www.motherjones.com/politics/2016/03/tennessee-drug-use-pregnancy-fetal-assault-murder-jail-prison-prosecution/>.
- Shankaran, S., Lester, B. M., Das, A., Bauer, C. R., Bada, H. S., Lagasse, L., & Higgins, R. (2007). Impact of maternal substance use during pregnancy on childhood outcome. *Seminars in fetal & neonatal medicine*, 12(2), 143–150.
- Sherba, R.T., Coxe, K.A., Gersper, B.E., & Linley, J.V. (2018). Employment Services and Substance Abuse Treatment. *Journal of Substance Abuse Treatment*, 87, 70-78.
- Soderberg, V.R. (2016). More than receptacles: An international human rights analysis of criminalizing pregnancy in the United States. *Berkeley Journal of Gender, Law, & Justice*, 31(2), 299-424.

- Stinson, F.S., Grant, B.F., Dawson, D.A., Ruan, W.J., Huang, B., & Saha, T. (2005). Comorbidity between DSM–IV alcohol and specific drug use disorders in the United States. *Drug and Alcohol Dependence*, 80(1), 105-116.
- Stone, R. (2015). Pregnant women and substance use: Fear, stigma, and barrier to care. *Health and Justice Journal*, 3(2), 1-15.
- Substance Abuse and Mental Health Services Administration. (2013, July 25). Trends in Substances of Abuse among Pregnant Women and Women of Childbearing Age in Treatment. *The TEDS Report Data Spotlight*. Retrieved on September 13, 2020, from <http://www.samhsa.gov/data/>.
- USA: Tennessee “fetal assault” law a threat to women’s health and human rights. (2016). *Amnesty International*. Retrieved on October 3, 2020, from <https://www.amnesty.org/download/Documents/AMR5136232016ENGLISH.pdf>.
- US Department of Health and Human Services. (2020, July 13). Fact Sheet: SAMHSA 42 CFR Part 2 Revised Rule. Retrieved on September 13, 2020, from <https://www.hhs.gov/about/news/2020/07/13/fact-sheet-samhsa-42-cfr-part-2-revised-rule.html>.
- U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, and Center for Behavioral Health Statistics and Quality. (2019). *National Survey on Drug Use and Health 2018* (NSDUH-2018-DS0001). Retrieved on April 10, 2021, from <https://datafiles.samhsa.gov/>.
- Vecchiarello, V. (2020). The criminalization of pregnancy and its effects on maternal health: understanding state interventions. *Fordham Urban Law Journal*, 47(4), 1051-1080.
- Yonkers, K. A., Howell, H. B., Allen, A. E., Ball, S. A., Pantalon, M. V., & Rounsaville, B. J.

- (2009). A treatment for substance-abusing pregnant women. *Archives of women's mental health, 12*(4), 221–227.
- Yonkers, K. A., Gotman, N., Kershaw, T., Forray, A., Howell, H. B., & Rounsaville, B. J. (2010). Screening for prenatal substance use: development of the Substance Use Risk Profile-Pregnancy scale. *Obstetrics and gynecology, 116*(4), 827–833.
- Yotebieng, K.A., Agot, K., Rota, G., Cohen, C.R., and Syvertsen, J.L. (2016). Qualitative study of substance use during pregnancy: Implications for reproductive healthcare in Western Kenya. *African Journal of Reproductive Health, 20*(4), 51-59.
- Young, N. K., Gardner, S., Otero, C., Dennis, K., Chang, R., Earle, K., & Amatetti, S. (2009). Substance-exposed infants: State responses to the problem. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Appendices

Appendix A: Semi-structured Interview Questions

1. What has been your experience working with maternal substance abusers?
2. What is this population's usual age, and why do you believe this issue is so prevalent within this age group?
3. What are the maternal substance abuse laws in your state, and how have they been effective?
4. What is the process for reporting a pregnant mother who abuses drugs or alcohol, and what happens to the mother once reported?
5. During counseling, how can the mandated reporter process hinder rapport between the client and the counselor?
6. What are suitable forms of substance abuse aftercare for pregnant substance abusers?
7. How can better substance abuse policies help advance public administration literature regarding governance and management?
8. How often do maternal substance abusers obtain issues with mental health?
9. What types of mental health issues might be visible in pregnant women who abuse drugs and alcohol?
10. How do you feel the family of a pregnant drug abuser is influenced when she is criminalized? Is it worth it?
11. How can state laws be structured to combat the later unification of children with their mothers?
12. What changes should be made to maternal substance abuse laws to ensure efficiency in the future?

Appendix B: Informed Consent Form

Project Title: Mental Health Effects of Maternal Substance Abuse Policymaking: Finding a Solution

Investigator(s): Sarah Foster; Dr. Jeremy Phillips

Project Overview: Participation in this research project is voluntary and is being done by Sarah Foster as part of her Doctoral Dissertation to determine the importance of implementing effective maternal substance abuse laws in various settings. Your participation will take about 1 to 1 ½ hours to respond to a series of open-ended questions to identify how laws are different for pregnant substance abusers among states. You will also be encouraged to share causally related experiences that you feel might help enhance the field while protecting the clients you serve and reframing from revealing their identities. Each state's law for maternal substance abuse will be studied and classified to identify difficulty or weakness. Semi-structured telephone interviews will be conducted using audio communication, which will be recorded using a digital recorder to protect participants and ensure confidentiality. Microsoft software will assist with the transcription process. All files will be stored in an encrypted file kept in a password-protected device. Also, these files will be destroyed no less than three years after manuscript development. Mental health and Substance abuse professionals have a duty to the law and clients to obtain confidentiality. Therefore, semi-structured interview questions will be formulated to address this matter's sensitivity and will not present questions that would be inappropriate by causing professionals to present client identifying information. Additionally, there is no direct benefit to you as a participant. Still, this research will help present knowledge to society on maternal substance abuse laws and the changes needed to ensure a more lasting impact on this population.

Sarah Foster is doing the research project as part of her Doctoral Dissertation to determine the importance of implementing effective maternal substance abuse laws in various settings. If you would like to take part, West Chester University requires that you agree and sign this consent form. You may ask Sarah Foster any questions to help you understand this study. If you do not want to be a part of this study, it will not affect any West Chester University services. If you choose to be a part of this study, you have the right to change your mind and stop being a part of the study at any time.

1. **What is the purpose of this study?**
 - To assess the necessity of enacting effective laws and raising awareness about maternal substance addiction, as well as to assess the effectiveness of weak and stringent laws.
2. **If you decide to be a part of this study, you will be asked to do the following:**
 - Respond to a series of open-ended questions to identify how laws vary for pregnant substance abusers among states. You will also be encouraged to share causally related experiences that you feel might help enhance the field while protecting the clients you serve and reframing from revealing their identities.
 - This study will take 1 to 1 ½ hours of your time.
3. **Are there any experimental medical treatments?**

- No
- 4. **Is there any risk to me?**
 - Minimal risk exists because data collected will consist of participant's working experiences.
- 5. **Is there any benefit to me?**
 - There are no direct benefits to the participant.
 - Other benefits may include knowledge to society on maternal substance abuse laws and the changes needed to ensure a more lasting impact on maternal substance abuse.
- 6. **How will you protect my privacy?**
 - The session will be conducted using audio communication, which will be recorded using a digital recorder to protect participants and ensure confidentiality.
 - Microsoft software will assist with the transcription process.
 - I will only be interviewing mental health and substance abuse professionals from Tennessee, Georgia, and Louisiana for protective precautions for maternal substance-abusing mothers and the fetus. The data collected for this study will be stored in an encrypted file, and all participants will be asked to provide informed consent to protect their privacy.
 - Your records will be private. Only Sarah Foster, Dr. Jeremy Phillips, and the IRB will have access to your identity.
 - Your name will **not** be used in any reports.
 - Records will be stored:
 - Encrypted file kept in a password-protected device.
 - Records will be destroyed after manuscript development, but no less than three years
- 7. **Do I get paid to take part in this study?**
 - No
- 8. **Who do I contact in case of research-related injury?**
 - For any questions with this study, contact:
 - **Primary Investigator:** Sarah Foster at 318-278-2520 or sf919434@wcupa.edu
 - **Faculty Sponsor:** Dr. Jeremy Phillips at 610-436-2016 or jphillips2@wcupa.edu
- 9. **What will you do with my Identifiable Information/Biospecimens?**
 - Not applicable.

For any questions about your rights in this research study, contact the ORSP at 610-436-3557.

I, _____ (your name), have read this form and I understand the statements in this form. I know that if I am uncomfortable with this study, I can stop at any time. I know that it is impossible to know all risks in a study, and I think that reasonable safety measures have been taken to decrease any risk.

Subject/Participant Signature: _____ Date: _____

Witness Signature: _____ Date: _____

Appendix C: Subject Participation Form



MENTAL HEALTH EFFECTS OF MATERNAL SUBSTANCE ABUSE POLICYMAKING: FINDING A SOLUTION

Lead Researcher: Sarah Foster

Sarah Foster from the Department of Public Policy and Administration at West Chester University of Pennsylvania is recruiting participants for a research study about weak and strict laws and how behavior can impact them. The law for maternal substance abuse is different among states, and the risk increases with early exposure. However, many congenital disabilities may be present, which could affect maternal substance abusers' resources. The strictness of the law refers to the extent of punishment through criminalization. This study may help us better understand weak maternal substance abuse laws versus laws that are strenuous. For this study, a weak law refers to laws with no significant consequences, such as completing a one-hour online course. Strict laws are those that have extensive outcomes, such as jail time.

You are eligible to participate in this study if you obtain experience working with mental health and substance abuse patients and agree to provide informed consent.

The study will take place using video or audio communication. Your participation will last for 1 to 1 ½ hours. As part of participating, you will be asked to respond to a series of open-ended questions to identify how laws are incompatible for pregnant substance abusers among states. You will also be encouraged to share causally related experiences that you feel might help enhance the field while protecting the clients you serve and reframing from revealing their identities.

This research project is voluntary, and participants will not be paid. If you participate, there is no anticipated direct benefit to you.

If you are interested in participating in this study, please contact Sarah Foster, the lead researcher, at (318) 278-2520 or sf919434@wcupa.edu.

Appendix D: Institutional Review Board (IRB) Approval Form



Office of Research and Sponsored Programs | West Chester University | Wayne Hall
West Chester, PA 19383 | 610-436-3557 | www.wcupa.edu

Protocol ID # 20210301A

This Protocol ID number must be used in all communications about this project with the IRB.

TO: Sarah Foster
FROM: Nicole M. Cattano, Ph.D.
Co-Chair, WCU Institutional Review Board (IRB)
DATE: 2/26/2021

Project Title: **Mental Health Effects of Maternal Substance Abuse Policymaking: Finding a Solution**
Date of Approval: 2/26/2021

Expedited Approval

This protocol has been approved under the new updated 45 CFR 46 common rule that went in to effect January 21, 2019. As a result, this project will not require continuing review. Any revisions to this protocol that are needed will require approval by the WCU IRB. Upon completion of the project, you are expected to submit appropriate closure documentation. Please see www.wcupa.edu/research/irb.aspx for more information.

Any adverse reaction by a research subject is to be reported immediately through the Office of Research and Sponsored Programs via email at irb@wcupa.edu.

Signature:



A handwritten signature in black ink, appearing to read 'Nicole M. Cattano'.

Co-Chair of WCU IRB

WCU Institutional Review Board (IRB)
IORG#: IORG0004242
IRB#: IRB00005030
FWA#: FWA00014155

West Chester University is a member of the State System of Higher Education

Appendix E: CITI Human Subject Training Certification

Completion Date 22-Sep-2020
Expiration Date 22-Sep-2023
Record ID 38403426

This is to certify that:

Sarah Foster

Has completed the following CITI Program course:

Social & Behavioral Research - Basic/Refresher (Curriculum Group)
Social & Behavioral Research - Basic/Refresher (Course Learner Group)
1 - Basic Course (Stage)

Under requirements set by:

West Chester University of Pennsylvania

Not valid for renewal of certification through CME. Do not use for TransCelerate mutual recognition (see Completion Report).

CITI
Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w8ea5221d-8815-4d93-b038-8ca2be554a19-38403426

Appendix F: Maternal Substance Abuse Laws Throughout the 50 States and D.C.

Table 15

Maternal Substance Abuse Laws Throughout the 50 States and the District of Columbia

States	Codes	Legislature	Consequences
Alabama	Ala. Code § 26-15-3.2	<ul style="list-style-type: none"> • A responsible person commits the crime of chemical endangerment of exposing a child to an environment in which the responsible person knowingly permits a child to have contact with a controlled substance. 	<ul style="list-style-type: none"> • Criminal child abuse or neglect • Priority treatment • Protected from discrimination in policy funded programs
Alaska	Alaska Stat. § 47.17.024	<ul style="list-style-type: none"> • A practitioner of the healing arts involved in the delivery or care of an infant who has been adversely affected by a controlled substance or alcohol shall immediately notify the nearest office of the Department of Health and Social Services of the infant's condition. 	<ul style="list-style-type: none"> • Mandated Reporting
Arizona	Rev. Stat. § 13-3620(E)	<ul style="list-style-type: none"> • A health-care professional who, after a routine newborn physical assessment of a newborn, believes that the newborn may be affected by the presence of alcohol, or a drug shall immediately report this information to the Department of Child Safety. 	<ul style="list-style-type: none"> • Child abuse or neglect • Priority treatment • Mandated Reporting
Arkansas	Ann. Code § 12-18-103(14)(B) Ann. Code § 12-18-310	<ul style="list-style-type: none"> • A test of the child's bodily fluids or bodily substances may be used as evidence to establish neglect under this subdivision. A test of the mother's bodily fluids or bodily substances may be used as evidence to establish neglect under this subdivision. • All healthcare providers involved in the delivery or care of infants shall contact the Department of Human Services regarding maternal substance abuse resulting in prenatal drug exposure to an illegal or a legal substance. 	<ul style="list-style-type: none"> • Child abuse or neglect • Priority treatment • Targeted program created • Mandated Reporting

States	Codes	Legislature	Consequences
California	Penal Code § 11165.13	<ul style="list-style-type: none"> Any indication of maternal substance abuse shall lead to an assessment of the needs of the mother and child pursuant to law. 	<ul style="list-style-type: none"> Targeted program created Mandated Reporting
Colorado	Rev. Stat. § 19-3-401(3)(a)-(c)	<ul style="list-style-type: none"> A newborn child may be detained in a hospital by a law enforcement officer upon the recommendation of a county Department of Social Services or by a physician, registered nurse, licensed practical nurse, or physician assistant while a court order is being pursued, but the newborn child must be released if a court order is denied. 	<ul style="list-style-type: none"> Child abuse or neglect Targeted program created
Connecticut	Gen. Stat. § 17a-54b	<ul style="list-style-type: none"> The Commissioner of Children and Families shall secure substance use treatment for infants, their mothers, and other caregivers and ensuring the infants grow up in substance-use-free homes. 	<ul style="list-style-type: none"> Targeted program created
Delaware	Ann. Code Tit. 11, § 1102	<ul style="list-style-type: none"> Endangering the welfare of a child shall be punished as follows: When the death of a child occurs while the child's welfare was endangered as defined above, endangering the welfare of a child is a class E felony. When serious physical injury to a child occurs while the child's welfare was endangered, as defined above, endangering the welfare of a child is a class G felony. 	<ul style="list-style-type: none"> Priority treatment
District of Columbia	Ann. Code Ann. § 4-1301.06a	<ul style="list-style-type: none"> Upon receipt of a report that a child is born addicted to or dependent on a controlled substance or has a significant presence of a controlled substance in his or her system at birth; has a controlled substance in his or her body as a direct and foreseeable consequence of the acts or omissions of the child's parent, guardian, or custodian; or is 	<ul style="list-style-type: none"> Mandated Reporting Investigation Drug Treatment

States	Codes	Legislature	Consequences
		regularly exposed to illegal drug-related activity in the home, the agency shall do the following: Commence an initial investigation in accordance with §§ 4-1301.04(b) and 4-1301.06. Determine whether the child should be removed temporarily from the home environment or can be protected in the home environment.	
Florida	Ann. Stat. § 39.01(35)(a)(2), (g)	<ul style="list-style-type: none"> • Exposure to a controlled substance or alcohol is established by either of the following: A test, administered at birth, which indicated that the child's blood, urine, or meconium contained any amount of alcohol or a controlled substance or metabolites of such substances, the presence of which was not the result of medical treatment administered to the mother or the newborn infant. 	<ul style="list-style-type: none"> • Child abuse or neglect • Targeted program created • Protected from discrimination in policy funded programs
Georgia	Ann. Code § 15-11-2(56)	<ul style="list-style-type: none"> • The term 'prenatal abuse' means exposure to chronic or severe use of alcohol or the unlawful use of any controlled substance that results in either of the following: Symptoms of withdrawal in a newborn or the presence of a controlled substance or a metabolite thereof in a newborn's body, blood, urine, or meconium that is not the result of medical treatment. 	<ul style="list-style-type: none"> • Priority treatment
Hawaii	Rev. Stat. § 350-1	<ul style="list-style-type: none"> • Child abuse or neglect means the acts or omissions of any person or legal entity in any manner or degree related to the child, residing with the child, or otherwise responsible for the child's care, which has resulted in harm to the physical or psychological health or welfare of 	<ul style="list-style-type: none"> • Child abuse or neglect

States	Codes	Legislature	Consequences
		a child under age 18 or has subjected the health or welfare of the child to any reasonably foreseeable, substantial risk of being harmed.	
Idaho	Idaho Code § 37-2737A (1)-(2)	<ul style="list-style-type: none"> • No law specific to Maternal Substance Abuse • It is unlawful for any person to manufacture, deliver, or possess with the intent to manufacture or deliver, a controlled substance as defined in schedules I, II, III, and IV in this chapter, upon the same premises where a child under age 18 is present 	<ul style="list-style-type: none"> • None listed
Illinois	Comp. Stat. Ch. 325, § 5/7.3b	<ul style="list-style-type: none"> • The service provider shall prepare a case management plan and assist the pregnant woman in obtaining counseling and treatment from a local substance use disorder treatment program licensed by the department or a licensed hospital that provides substance abuse treatment services. 	<ul style="list-style-type: none"> • Child abuse or neglect • Priority treatment • Targeted program created • Mandated Reporting • Protected from discrimination in policy funded programs
Indiana	Ann. Code § 31-34-1-10	<ul style="list-style-type: none"> • A child is a child in need of services under the following circumstances: The child is born with any of the following: fetal alcohol syndrome, neonatal abstinence syndrome, and any amount, including a trace amount, of a controlled substance, a legend drug, or a metabolite of a controlled substance or legend drug in the child's body, including the child's blood, urine, umbilical cord tissue, or meconium. 	<ul style="list-style-type: none"> • Child abuse or neglect • Targeted program created • Drug testing
Iowa	Ann. Code § 232.77(2)	<ul style="list-style-type: none"> • A positive test result obtained prior to the birth of a child shall not be used for the criminal prosecution of a parent for acts and omissions resulting in 	<ul style="list-style-type: none"> • Child abuse or neglect • Priority treatment • Drug testing • Mandated Reporting

States	Codes	Legislature	Consequences
		intrauterine exposure of the child to an illegal drug.	<ul style="list-style-type: none"> Protected from discrimination in policy funded programs
Kansas	KS Stat § 65-1,163 (2012)	<ul style="list-style-type: none"> The secretary of health and environment shall develop a risk assessment profile to assist health care providers with screening pregnant women for prenatal substance abuse. 	<ul style="list-style-type: none"> Priority treatment Protected from discrimination in policy funded programs
Kentucky	Rev. Stat. § 214.160(2)-(6)	<ul style="list-style-type: none"> Any physician or person legally permitted to engage in attendance upon a pregnant woman may administer to each newborn infant born under that person's care a toxicology test to determine whether there is evidence of prenatal exposure to alcohol, a controlled substance. 	<ul style="list-style-type: none"> Child abuse or neglect Mandated Reporting Drug Testing Targeted program created Priority treatment Protected from discrimination in policy funded programs
Louisiana	Ch. Code Art. 610(G)	<ul style="list-style-type: none"> If there are symptoms of withdrawal in the newborn or other observable and harmful effects in his or her physical appearance or functioning that a physician has cause to believe are due to the chronic or severe use of alcohol by the mother during pregnancy or are the effects of fetal alcohol spectrum disorder, the physician shall issue a report in accordance with this article. 	<ul style="list-style-type: none"> Child abuse or neglect Mandated Reporting Drug Testing
Maine	Rev. Stat. Tit. 22, § 4011-B	<ul style="list-style-type: none"> A health-care provider involved in the delivery or care of an infant born affected by substance use or has withdrawal symptoms that require medical monitoring or care beyond standard newborn care resulted from prenatal drug exposure, whether the prenatal exposure was to legal or illegal drugs or had a fetal alcohol spectrum disorder shall notify the 	<ul style="list-style-type: none"> Child abuse or neglect Priority treatment

States	Codes	Legislature	Consequences
		Department of Health and Human Services of that condition in the infant.	
Maryland	Family Law § 5-706.3(d)	<ul style="list-style-type: none"> The local Department of Social Services and the Department of Health shall assist the mother of a child who is born drug-exposed in obtaining drug treatment and providing supportive services to maintain family unity. 	<ul style="list-style-type: none"> Targeted program created
Massachusetts	Gen. Laws Ann. Ch. 119, § 51A	<ul style="list-style-type: none"> A mandated reporter who, in his or her professional capacity, has reasonable cause to believe that a child is suffering physical or emotional injury resulting from (i) abuse inflicted upon him or her that causes harm or substantial risk of harm to the child's health or welfare, including sexual abuse; (ii) neglect, including malnutrition; or (iii) physical dependence upon an addictive drug at birth, shall immediately communicate with the Department of Children and Families orally and, within 48 hours, shall file a written report with the department detailing the suspected abuse or neglect. 	<ul style="list-style-type: none"> Mandated Reporting
Michigan	Prot. Serv. Man. PSM 716-7	<ul style="list-style-type: none"> Parental substance use or positive toxicology in a newborn does not in and of itself prove child abuse or neglect. A caseworker will need to determine if harm has occurred or is likely to occur, not simply if the child has been affected by or exposed to a substance. 	<ul style="list-style-type: none"> Mandated Reporting

States	Codes	Legislature	Consequences
Minnesota	Ann. Stat. § 626.5561, Subd. 2	<ul style="list-style-type: none"> • Upon receipt of a report, the local welfare agency shall immediately conduct an appropriate assessment and offer services indicated under the circumstances. Services offered may include, but are not limited to, a referral for chemical dependency assessment, a referral for chemical dependency treatment is recommended, and a referral for prenatal care. 	<ul style="list-style-type: none"> • Child abuse or neglect • Grounds for civil commitment • Mandated Reporting • Drug Testing • Targeted program created
Mississippi	SB 2113- Attempted January 11, 2019	<ul style="list-style-type: none"> • A person commits the crime of chemical endangerment of a child or chemical endangerment of a fetus if the person knowingly, recklessly, or intentionally causes or permits a child or a fetus to be exposed to, to ingest or inhale, or to have contact with a controlled substance or precursor drug or chemical. 	<ul style="list-style-type: none"> • Chemical Endangerment- failed to pass
Missouri	Ann. Stat. § 191.737(1)-(3), (5)	<ul style="list-style-type: none"> • Notwithstanding the physician-patient privilege, any physician or health-care provider may refer to the Children’s Division families in which children may have been exposed to a controlled substance or alcohol, as evidenced by a written assessment, made, or approved by a physician, health-care provider, or by the division, which documents the child as being at risk of abuse or neglect. 	<ul style="list-style-type: none"> • Child abuse or neglect • Priority treatment • Protected from discrimination in policy funded programs
Montana	Ann. Code § 41-3-201(3)	<ul style="list-style-type: none"> • A physician or other healthcare professional involved in the delivery or care of an infant shall report to the department any infant known to the professional to be affected by a dangerous drug. 	<ul style="list-style-type: none"> • Mandated Reporting
Nebraska	Rev. Stat. § 28-457	<ul style="list-style-type: none"> • No law specific to Maternal Substance Abuse 	<ul style="list-style-type: none"> • Any child or vulnerable adult who resides with a person

States	Codes	Legislature	Consequences
		<ul style="list-style-type: none"> Any person who knowingly or intentionally causes or permits a child or vulnerable adult to inhale or have contact with methamphetamine, a chemical substance, or paraphernalia is guilty of a class I misdemeanor. 	<p>violating the subsections above shall be taken into protective custody as provided in the Adult Protective Services Act or the Nebraska Juvenile Code.</p>
Nevada	Rev. Stat. § 432B.220(3)	<ul style="list-style-type: none"> Any person who is a mandated reporter who delivers or provides medical services to a newborn infant, notify an agency that provides child welfare services of the condition of the infant and refer each person who is responsible for the welfare of the infant to an agency for appropriate counseling, training, or other services. 	<ul style="list-style-type: none"> Child abuse or neglect Mandated Reporting
New Hampshire	Rev. Stat. § 639-A:2	<ul style="list-style-type: none"> No law specific to Maternal Substance Abuse No person shall knowingly engage in any of the following activities in the presence of a child or vulnerable adult; in the residence of a child or a vulnerable adult; in a building, structure, conveyance, or outdoor location where a child or vulnerable adult might be expected to be present; within any drug-free school zone; in a room offered to the public for overnight accommodations. No person shall knowingly cause or permit a child or vulnerable adult to inhale, be exposed to, have contact with, or ingest methamphetamine, a chemical substance, or methamphetamine paraphernalia. 	<ul style="list-style-type: none"> Mandated Reporting Child abuse or neglect DCFS investigation
New Jersey	Admin. Code § 3A:26-1.1	<ul style="list-style-type: none"> The Division of Child Protection and Permanency shall receive reports of substance-affected 	<ul style="list-style-type: none"> Child abuse or neglect Mandated Reporting Drug Testing

States	Codes	Legislature	Consequences
		<p>infants at ambulatory care facilities. Upon receipt of a report, the division shall first determine if the report is an allegation of child abuse or neglect.</p> <ul style="list-style-type: none"> • The term substance-affected infant means the following: An infant whose mother had a positive toxicology screen for a controlled substance or metabolite thereof during pregnancy or at the time of delivery. An infant who has a positive toxicology screen for a controlled substance after birth that is attributable to maternal substance use during pregnancy 	<ul style="list-style-type: none"> • Substance abuse treatment
New Mexico	Admin. Code § 8.10.3.17	<ul style="list-style-type: none"> • Within 45 days of acceptance of the report for investigation, the child protective services worker shall complete an investigation of child abuse or neglect and decide whether the report's allegations of abuse or neglect are substantiated or unsubstantiated. Credible evidence upon which to base a finding of substantiation may include a child born drug-exposed or affected due to illegal or illicit drug use. 	<ul style="list-style-type: none"> • Child abuse or neglect • Mandated reporting
New York	N/A	<ul style="list-style-type: none"> • No law specific to Maternal Substance Abuse 	<ul style="list-style-type: none"> • The court decided in a 2003 case involving alcohol addiction that New York's child endangerment legislation is not applicable to a pregnant woman's behavior regarding the fetus (Miranda et al., 2015) • Mandated Reporting

States	Codes	Legislature	Consequences
North Carolina	Ann. Stat. § 15A-1340.16	<ul style="list-style-type: none"> • No law specific to Maternal Substance Abuse • When imposing a sentence upon conviction of a crime, the court shall consider evidence of aggravating or mitigating factors present in the offense that make an aggravated or mitigated sentence appropriate, but the decision to depart from the presumptive range is in the discretion of the court. The State bears the burden of proving beyond a reasonable doubt that an aggravating factor exists, and the offender bears the burden of proving by a preponderance of the evidence that a mitigating factor exists. 	<ul style="list-style-type: none"> • Mandated Reporting • Drug Testing
North Dakota	Cent. Code § 50-25.1-16	<ul style="list-style-type: none"> • If a report alleges a pregnant woman's use of a controlled substance for a nonmedical purpose, the department or its designee shall immediately initiate an appropriate assessment and offer services indicated under the circumstances. Services offered may include a referral for an addiction assessment, a referral for substance use disorder treatment, if recommended, or a referral for prenatal care. 	<ul style="list-style-type: none"> • Child abuse or neglect • Mandated Reporting • Drug Testing
Ohio	Rev. Code § 2919.22(B)(6), (E)(3)	<ul style="list-style-type: none"> • No law specific to Maternal Substance Abuse • No person shall allow the child to be on the same parcel of real property and within 100 feet of, or, in the case of more than one housing unit on the same parcel of real property, in the same housing unit and within 100 feet of the unit, of any act in violation 	<ul style="list-style-type: none"> • If the drug involved is methamphetamine, the court shall impose a mandatory prison term on the offender

States	Codes	Legislature	Consequences
		of § 2925.04 (prohibiting the cultivation of marijuana or the manufacture of a controlled substance) or § 2925.041 (prohibiting the possession of any of the chemicals used in the manufacture of a controlled substance)	
Oklahoma	Ann. Stat. Tit. 10A, § 1-2-101	<ul style="list-style-type: none"> • Every healthcare professional involved in the prenatal care of expectant mothers, or the delivery or care of infants shall promptly report to the Department of Human Services instances in which infant tests positive for alcohol or a controlled dangerous substance. 	<ul style="list-style-type: none"> • Child abuse or neglect • Priority treatment • Protected from discrimination in policy funded programs
Oregon	Rev. Stat. § 163.547	<ul style="list-style-type: none"> • No law specific to Maternal Substance Abuse • A person having custody or control of a child under age 16 commits the crime of child neglect in the first degree if the person knowingly leaves the child or allows the child to be in the following: In or upon premises, or in the immediate proximity of premises, where a cannabinoid extract is being processed if the premises have not been licensed under § 475B.090. In or upon premises and in the immediate proximity where controlled substances are criminally delivered, manufactured for consideration or profit, or where a chemical reaction involving one or more precursor substances is occurring. 	<ul style="list-style-type: none"> • Child abuse or neglect
Pennsylvania	Cons. Stat. Tit. 23, § 6386(a), (a.1)	<ul style="list-style-type: none"> • For the purpose of assessing a child and the child's family for a plan of safe care, a health-care provider shall immediately give 	<ul style="list-style-type: none"> • Mandated Reporting • Targeted program created

States	Codes	Legislature	Consequences
		notice or cause notice to be given to the Department of Human Services if the provider is involved in the delivery or care of a child under one year of age and the health-care provider has determined, based on standards of professional practice, the child was born affected by substance use or withdrawal symptoms resulting from prenatal drug exposure or a fetal alcohol spectrum disorder.	
Rhode Island	DCYF Oper. Proc. # 500.0080	<ul style="list-style-type: none"> • All substance-exposed newborns must have a plan of safe care at the time of discharge from the birthing hospital. Plans of safe care address the health needs of the newborn and the substance use disorder treatment needs of the parent and/or caregiver. 	<ul style="list-style-type: none"> • Child abuse or neglect • Mandated Reporting • Drug Testing
South Carolina	Ann. Code § 63-7-1660(F)	<ul style="list-style-type: none"> • It is presumed that a newborn is an abused or neglected child and that cannot be protected from further harm without being removed from the custody of the mother upon proof of the following: A blood or urine test of the child at birth or a blood or urine test of the mother at birth shows the presence of any amount of a controlled substance. • If the courts finds that a child has been neglected or abused, the accused individual's name will be placed on the Central Registry of Child Abuse and Neglect. 	<ul style="list-style-type: none"> • Child abuse or neglect • Targeted program created
South Dakota	Codified Laws § 26-8A-2(9)	<ul style="list-style-type: none"> • 'Abused or neglected child' includes a child who was subject to prenatal exposure to abusive use of alcohol, marijuana, or any controlled drug or substance not lawfully prescribed by a 	<ul style="list-style-type: none"> • Child abuse or neglect • Grounds for civil commitment • Mandated Reporting • Drug Testing

States	Codes	Legislature	Consequences
		practitioner as authorized by statute.	
Tennessee	Admin. Pol. & Proc. # 14.21	<ul style="list-style-type: none"> The Department of Children's Services shall intervene and respond timely to allegations involving drug-exposed children (DEC) by screening and assigning reports made to the child abuse hotline to child protection services based on the severity of or potential for physical, mental, or emotional harm to the child. The alleged child victim and/or mother had a positive drug screen at birth. 	<ul style="list-style-type: none"> Targeted program created Priority treatment Protected from discrimination in policy funded programs Mandated Reporting
	Tennessee Code § 39-13-107(c) <i>Expired July 2016</i>	<ul style="list-style-type: none"> Authorizes the "assault for the illegal use of a narcotic during pregnancy, if the child is born with addiction or harmed by the narcotic drug" (Soderberg, 2016, p. 308-307). 	<ul style="list-style-type: none"> Criminalization according to the Fetal Assault Law
Texas	Fam. Code § 161.001	<ul style="list-style-type: none"> The court may order the termination of the parent-child relationship if the court finds, by clear and convincing evidence, that the parent has used a controlled substance in a manner that endangered the health or safety of the child and did the following: <ul style="list-style-type: none"> Failed to complete a court-ordered substance abuse treatment program or, after completion of a court-ordered substance abuse treatment program, continued to abuse a controlled substance. Been the cause of the child being born addicted to alcohol or a controlled substance, other than a controlled substance legally obtained by prescription. 	<ul style="list-style-type: none"> Child abuse or neglect

States	Codes	Legislature	Consequences
Utah	Ann. Code § 62A-4a-409(1)	<ul style="list-style-type: none"> The division shall make a thorough preremoval investigation upon receiving either an oral or written report of alleged abuse, neglect, fetal alcohol syndrome, or fetal drug dependency, when there is reasonable cause to suspect that a situation of abuse, neglect, fetal alcohol syndrome, or fetal drug dependency exists. The primary purpose of the investigation shall be the protection of the child. 	<ul style="list-style-type: none"> Child abuse or neglect Mandated Reporting Priority treatment
Vermont	Fam. Serv. Pol. Man., Policy 51	<ul style="list-style-type: none"> The Family Division will conduct an assessment when there are concerns regarding a newborn infant that has a positive toxicology screen for illegal substances or prescription medication not prescribed to the patient or administered by a physician. 	<ul style="list-style-type: none"> Child abuse or neglect Mandated Reporting Targeted program created
Virginia	Admin. Code Tit. 22, § 40-705-40	<ul style="list-style-type: none"> Certain facts indicating that a newborn may have been exposed to a controlled substance prior to birth constitute a reason to suspect that a child is abused or neglected. Whenever a healthcare provider makes a finding or diagnosis, then the provider must make a report to child protective services immediately. Following the receipt of a report, the department may determine that no further action is required if the mother of the infant sought or received substance abuse counseling or treatment. 	<ul style="list-style-type: none"> Child abuse or neglect Mandated Reporting Targeted program created
Washington	Rev. Code § 26.44.170(1), (3)	<ul style="list-style-type: none"> If a determination is made that there is probable cause to believe abuse of alcohol or controlled substances have contributed to the child abuse or neglect, the 	<ul style="list-style-type: none"> Child abuse or neglect Targeted program created

States	Codes	Legislature	Consequences
		Department of Social and Health Services shall, within available funds, cause a comprehensive chemical dependency evaluation to be made of the person or persons so identified. The evaluation shall be conducted by a physician or persons certified under rules adopted by the department to make such an evaluation.	
West Virginia	W. Va. Code § 49-1-201	<ul style="list-style-type: none"> • West Virginia is required to offer priority treatment services (Guttmacher, 2021). • Imminent danger to the physical well-being of the child' means an emergency in which the welfare or the life of the child is threatened. This may include reasonable cause to believe that the parent, guardian, or custodian's abuse of alcohol or drugs or other controlled substance, as defined in § 60A-1-101, has impaired his or her parenting skills to a degree as to pose an imminent risk to a child's health or safety 	<ul style="list-style-type: none"> • Priority treatment
Wisconsin	Citation: Ann. Stat. § 48.205	<ul style="list-style-type: none"> • An expectant adult mother of an unborn child may be held in physical custody if the intake worker determines that there is probable cause to believe that there is a substantial risk that the physical health of the unborn child, and of the child when born, will be seriously endangered by the adult expectant mother's habitual lack of self-control in the use of alcohol beverages, controlled substances, or controlled substance analogs. 	<ul style="list-style-type: none"> • Child abuse or neglect • Grounds for civil commitment • Mandated Reporting • Targeted program created • Priority treatment

States	Codes	Legislature	Consequences
Wyoming	Ann. Stat. § 6-4-405	<ul style="list-style-type: none"> • No law specific to Maternal Substance Abuse • No person shall knowingly and willfully cause or permit any child to absorb, inhale, or otherwise ingest any amount of methamphetamine • No person having the care or custody of a child shall knowingly and willfully permit the child to remain in a room, dwelling, or vehicle where that person knows that methamphetamine is possessed, stored, or ingested. 	<ul style="list-style-type: none"> • Any person who violates any of the provisions of the subsections above is guilty of endangering a child punishable by imprisonment for no more than 5 years, a fine of no more than \$5,000, or both.

Note: Adapted from “Parental substance use as child abuse” by Child Welfare Information Gateway, 2020, p. 5-51, <https://www.childwelfare.gov/topics/systemwide/laws-policies/state/>. “Mississippi bill regarding the chemical endangerment of a fetus (SB 2113)” by Rewire News, 2019, February 6, <https://rewirenewsgroup.com/legislative-tracker/law/mississippi-bill-regarding-the-chemical-endangerment-of-a-fetus-sb-2113/>. “Substance use during pregnancy” by Guttmacher Institute, 2021, April 1, <https://www.guttmacher.org/state-policy/explore/substance-use-during-pregnancy>. “How states handle drug use during pregnancy” by L. Miranda, V. Dixon, & C. Reyes, 2015, September 15, <https://www.guttmacher.org/state-policy/explore/substance-use-during-pregnancy>.

Appendix G: Important Acronyms

AA	Alcoholics Anonymous
ASAM	American Society of Addiction Medicine
ACASI	Audio Computer-Assisted Self-Interview
CSAT	Center for Substance Abuse Treatment
DCFS	Department of Children and Family Services
DHHS	Department of Health and Human Services
DV	Dependent Variable
FAS	Fetal Alcohol Syndrome
HCUP	Healthcare Cost and Utilization Project
HIPAA	Health Insurance Portability and Accountability Act
H	Hypotheses
IV	Independent Variable
IOP	Intensive Outpatient Programs
LAC	Licensed Addiction Counselor
LCSW	Licensed Clinical Social Worker
LPC	Licensed Professional Counselor
MAHEC	Mountain Area Health Education Center
NA	Narcotics Anonymous
NAS	Neonatal Abstinence Syndrome
NCBDDD	National Center on Birth Defects and Developmental Disabilities
NSDUH	National Survey on Drug Use and Health
NIDA	National Institute on Drug Abuse

OBH	Office of Behavioral Health
PTSD	Post-Traumatic Stress Disorder
RQ	Research Question
SE	Standard Error
SAMHSA	Substance Abuse and Mental Health Services Administration
SUD	Substance Use Disorder
SIDS	Sudden Infant Death Syndrome
SNAP	Supplemental Nutrition Assistance Program
SPSS	Statistical Package for the Social Sciences
T-ACE	Tolerance, Annoyed, Cut down, and Eye Opener
TANF	Temporary Assistance for Needy Families
TWEAK	Tolerance, Worry, Eye Opener, Amnesia, and Cutdown
WIC	Women, Infant, & Children