CHILDREN BORN TO SUBSTANCE ABUSING MOTHERS

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Honors Thesis

Abstract

In our world today, we are facing an increase in mental health awareness. A major topic in this category is babies being born to addicted mothers. Children born to these mothers are entered into this world already needing help. What is important to focus on is whether the baby is born with withdrawal symptoms right away. As well as focusing on what type of environment they will be entered into. Is the mother going to get sober? Is she going to get treatment? As well as, is she addicted to drugs or alcohol. All of these will be examined and related back to how the child is affected mentally, emotionally, and physically. The main focus of this paper is, the life of the children born to mothers who struggle with substance abuse. This project will break down scholarly journals, findings from local counselors in my community, and formulate a way to improve my own community when it comes to helping these mothers and children. By focusing on my local community, I can see how families are affected by substance abuse, and see where our mental health system needs help.

Keywords: Substance Abuse, Neonatal Abstinence Syndrome, CPP

Honors Thesis

Children Born to Substance Abusing Mothers

Introduction

My research focuses on children with mothers who struggle with substance abuse. In our world today, we are facing an increase in mental health awareness and education. A major topic in this category is babies being born to addicted mothers. Children born to these mothers are entered into this world already needing help, physically, mentally and emotionally. The inspiration for my thesis is to learn more about how my community is helping out the children born to addicted mothers. By learning more about my community, and the proper way to care for these children, I will figure out what the Manchester, NH area is doing to help, and what they could improve on.

Children born to drug addicted mothers are entered into this world already needing help. Every 25 minutes a baby with Neonatal Abstinence Syndrome (NAS) is born (Oei, et al, 2017). NAS is when an infant develops a withdrawal syndrome because they were prenatally exposed to opioids. (Shearer et al, 2018). When women use opioids during pregnancy they pass through the placenta and create a dependency on opioids on the infant. There are long term effects which include struggles in school. Ju Lee Oei et al in 2017 found that 37.7% of children with NAS did not meet the National Minimum Standard, a predetermined minimum standard for each grade level, and those who don't meet it are considered to not have the necessary skills to move to the next grade level in school.

Another substance that women can abuse while pregnant is alcohol. Fetal Alcohol Syndrome is when a mother abuses alcohol while pregnant, and this can affect the child. The child can have facial dysmorphia, growth problems, structural, neurological and functional abnormalities (Bertrand, Floyd, & Weber, 2005). FAS can have lifelong consequences for the

child such as attention problems (Bertrand, Floyd, & Weber, 2005). Interventions to help children can include: stable home placement, strong parent-child relationship building, and educating the parents and caregivers on the disease (Bertrand, Floyd, & Weber, 2005).

The first goal of my research was to find out how we can help children born to substance abusing mothers through research. The second goal was to contact local groups to learn more about this problem in relation to children in New Hampshire and what kinds of treatments or interventions counselors have been using. The organizations I interviewed are: Amoskeag Health, and Hope on Haven Hill. The final goal of this research was to focus on the successful treatments our community has been using, and if there is anything else that needs to be improved on, or used more often. This thesis begins by giving background information on substance abuse, and what that means for the baby and mother. Next it discusses my interviews with local NH counselors, and finishes with ways our community is improving and helping these issues in the Manchester/NH area. By discovering ways my community is helping these children, and ideas to better the help already given, our community can improve, and supply the right type of care for these children.

Drug Abuse

When a mother uses opioids while pregnant she is affecting her unborn child in more ways than she thinks. According to the study, *Journal of Neonatal Nursing,* five days after birth is when the diagnosis of Neonatal Abstinence Syndrome occurs (Shearer et al, 2018). Neonatal Abstinence Syndrome is "a withdrawal syndrome that occurs in infants exposed to opioids *in utero*, is a national health epidemic," (Shearer, J. N., et al, 2018). The CDC also defines NAS as, "a group of conditions that can occur when newborns withdraw from certain substances, including opioids, that they were exposed to before birth," (2020). According to Shearer et al, in

2013 there were an estimated 28,000 infants diagnosed with NAS in the US (2018). When women use opioids during pregnancy they pass through the placenta and create a dependency on opioids for the infant. The effects at birth for the baby include high-pitched crying, low birth weight, irritability, seizures, tremors, trouble sleeping, vomiting, poor weight gain, increased sweating and more, (Shearer, J. N., et al, 2018).

The type of substance used during pregnancy, the last time it was used, and whether the baby is premature or not play into the factors of how bad the newborn is affected by these withdrawal signs (CDC, 2020). According to the CDC every 19 minutes in the US a baby is born with NAS, that means 80 babies are born with NAS every day (CDC, 2020). The CDC also reports that using opioids during pregnancy can cause stillbirths, preterm births and specific birth defects (CDC, 2020). The type of opioids used can vary, some examples are heroin, oxycodone, methadone, buprenorphine and codeine. It is note-worthy to mention that according to the CDC, not all babies prenatally exposed to opioids develop NAS symptoms however they are still affected by the prenatal exposure either in short term or long term (CDC, 2020). As you can see the baby is highly affected right away because of their mother's drug dependency.

The baby grows up and still experiences long-lasting effects from their mother's prenatal opioid abuse. According to Shearer et al, (2018), children exposed to opioids in utero are found to have decreased brain volumes at ages 10-14. As well as significantly more likely to be diagnosed with ADHD at these same ages. Children diagnosed with NAS scored lower than 5th graders when they were in seventh grade (J.L. Oei et al, 2017). In a study by *Journal of Pediatric Nursing,* results show that at age 1 and 5 both children with NAS and without were showing signs of a language delay (Miller, 2019). However, at age 10, 24% with NAS had a language

delay and only 12% without NAS. It is clear the child tends to struggle in school due to their prenatal exposure, which is another reason it is important to help these children.

I believe the environment the child is placed into after birth is crucial because it can affect their development. In a study by *Clinical Pediatrics* it states that 66% of the caregivers continue to use substances at the five-year follow up (Pulsifer et al., 2008). When comparing the 1 year and 10-year follow ups in Miller's study from above, less children with NAS lived with their biological parents after 10 years (Miller, 2019). Having a parent that struggles with substance abuse, and/or not living with both parents can take a toll on the child. If the baby is taken from their biological parent, development and treatment can also be affected. The immediate help the baby receives is important, but the future of the child plays a role in their development after their exposure is equally important.

Once the baby is born, the mother has a responsibility to care for this child. The child's success depends on how the mother chooses to raise the baby. Addiction causes the brain to be filled with excessive amounts of pleasure neurotransmitters such as dopamine (Suchman & Decoste, 2018). The problem is dopamine and other neurotransmitters reward our brain for human behaviors that we need for survival. If the brain becomes flooded with dopamine as it does when abusing drugs, that makes the neurotransmitter less available for uptake. This results in an imbalance of neurochemicals meaning the behaviors such as caregiving which are usually rewarded as pleasure, are rewarded or experienced as a stressful and neutral event. This affects the mothers view on caregiving (Suchman & Decoste, 2018). In the US 1 in 8 children aging 17 or younger live with at least one parent struggling with substance use (Lipari & Van Horn, 2017). Children living with parents who struggle with substance abuse tend to get involved in it

themselves as they grow up, as well as at a risk for child-maltreatment and welfare compared to other children (Lipari & Van Horn, 2017).

Babies of NAS are associated with inattention and some struggle socially (Hoppestad, 2020). These usually persist into toddlerhood. As well as, problems regulating their emotions later in life when they must interact with their peers. However, there are still many questions not answered in-regards to this focus point. More babies with NAS than those without NAS qualify for an assessment for special education. Babies prenatally exposed to opioids tend to struggle in the long run with emotions, behavior, social skills and attention (Hoppestad, 2020). The child is not only affected physically at birth but also socially and emotionally as they grow up.

Based on the lifelong struggles of babies prenatally exposed to opioids, it is clear that these individuals need support throughout life. Extra help in the classroom is a great way to start. According to a study by the Tennessee Department of Health they found that children with NAS were more likely to be evaluated for an educational disability, developmental delay, speech/ language impairment, and would need classroom support. Classroom support can include resources such as speech therapy (Center for Disease Control and Prevention, 2019). As well as help socializing, for example, encouraging clubs and hobbies is a great way to meet new people, strengthen your people skills, and create a support system. However, more research is needed into these topics.

Alcohol Abuse

If the mother is addicted to alcohol, and abuses it while pregnant the child may be diagnosed with Fetal Alcohol Syndrome (FAS). Fetal Alcohol Syndrome is when the child is prenatally exposed to alcohol during pregnancy (Bertrand, Floyd & Weber, 2005). Approximately 4 million babies are born to alcohol exposure, and an estimated 1,000 to 6,000

are born with FAS (Bertrand, Floyd & Weber, 2005). The three things that are looked for and documented when diagnosing FAS are face abnormalities, growth deficits, and CNS abnormalities. Examples of face abnormalities include smooth philtrum, thin vermillion border and small palpebral fissures. An example of growth deficits includes documented height and weight problems. The CNS abnormalities include head circumference, brain abnormalities, neurological problems, and functional deficits which include executing functioning deficits, motor functioning delays, hyperactivity, attention problems, and social skills struggles.

In 2011 the CDC was the first organization to start advocating for federal funds to help develop and test interventions for people with FAS (Bertrand, Floyd & Weber, 2005). For example, modified math curriculums for the person diagnosed with FAS to help them in the classroom. Another example is developing a program to help the person strengthen their social skills and develop friendships.

When it comes to interventions for individuals diagnosed with FAS there needs to be improvement. These interventions should have a strategy to stabilize the homes or placements of the individual. The parent and the child need interaction, and the parent needs to be educated on the diagnosis. Services for FAS needs to be accessible and advocated for. Lastly, we need educated professionals who work with the individual and their family, and be able to educate them all on FAS (Bertrand, Floyd & Weber, 2005). Interventions for individuals diagnosed with FAS should be tailored to the individual personal needs. This should include communication skills, social skills, emotional development, verbal and comprehension ability, language development, and if needed medication referral (Bertrand, Floyd & Weber, 2005).

The lifelong effects of NAS and FAS show similarities. Children with either syndrome struggle socially, and need help strengthening their skills. They both also struggle with emotional

development and managing their emotions. As well as, benefit from extra support in the classroom. Most importantly, for a successful treatment they need parent and child interaction and a healthy environment to grow up in. This can include whether or not the mother continues to use. There are differences in the symptoms. NAS recover is highly focused on the baby and their withdrawal symptoms. FAS is heavily linked to physical abnormalities to the face, body, and CNS.

New Hampshire

One of the goals of this research was to focus on my community, the state of New Hampshire and see how it is treating the problem of babies born to mothers struggling with substance abuse. I believe it necessary to focus on our struggles with babies born to opioids. In 2016 New Hampshire had almost three times more fentanyl overdoses than the national average (Meier et al., 2019). Hillsborough county was heavily targeted because it contains Manchester and Nashua, two big cities. We also struggle because we lack funding for medication for opioid use disorder (Meier et al., 2019). New Hampshire reported a jump from 52 babies with NAS to 269 between the years of 2005 and 2015 (Smith, 2017). These babies stay in the hospital longer than babies without NAS. Hospitals in NH have some treatments for NAS babies which include cuddling programs and skin to skin contact which is important for the baby. Dartmouth Hitchcock Medical Center was one of the first programs for mothers in recovery in the year 2013. The program helped pregnant women who are addicted to opioids access treatment. (Smith, 2017).

Another NH program that is working to help babies diagnosed with NAS is Concord Hospital, located in Concord, NH. This hospital has a wing in the hospital specific for babies with NAS. Between 2006 and 2011 newborns born withdrawing had doubled in NH (Ganley &

Brindley, 2016). In 2015, 56 babies were born to opioids in Concord Hospital alone. Concord hospital has some very creative ways to help soothe these babies, they use music therapy and essential oils to help make the child feel comfortable. They use morphine to help wean them off of the drug. It typically takes 8-10 days. The withdrawal process involves the baby experiencing some or all of the following symptoms: crying inconsolably, trouble sleeping, irritability, nausea, vomiting, and diarrhea. When the baby is finally released, they refer them to an early intervention to help. For the mother, after discharge they can get help with a lactation course and postpartum emotional support for them post-birth (Ganley & Brindley, 2016). Something that truly stood out to me about this program and article is it says, "A lot of these families are fearful that we're going to remove their baby from them as soon as it's born, and we're actually modeling and mimicking the exact opposite. We know that babies, during withdrawal, have the best outcomes whenever they have a high level of interaction with their biological parent," (Ganley & Brindley, 2016). These two hospitals are focusing on the interaction and connection between mother and child which is important for success.

Interviews

To further understand the ways that New Hampshire is tackling the issue of maternal addiction, I interviewed counselors in New Hampshire. Counselors were asked the same five questions:

- What kind of programs/interventions does your organization have to help children with substance abusing parents?
- Do you find 1 intervention/treatment/program more influential than the rest?
- Do you have any advice for counselors or other adults in these children's lives?
- What is a way you think NH/ Manchester is doing well at helping these children?

- What is a way you think NH/ Manchester needs to improve on when helping these children?

The first individual I interviewed was Beth O'Dell, a Clinical Director and LCMHC from Hope on Havenhill located in New Hampshire. The program her company uses to help children with substance abusing parents is one that all mothers get enrolled in an early head start program. This includes early support service, early assessments, and developmental milestones. This program at Hope on Havenhill supports the mothers and babies to make sure they hit important milestones and if they do not, they receive the right services. Beth states that the best intervention her company uses is a combination of everything they do to support mothers. Which is a big component of their programming. Their program includes a combination of evidence based parenting classes, child development, integration of learning parenting skills and nurturing parenting.

When asked what her advice is for counselors and other adults in these children's lives, Beth responded by saying make sure they are educating themselves on milestones of the baby. She says to be observant of bonding between parent and child, it is important for the child to develop healthy and supportive ways. Even if the mother has few visits, the bond doesn't vanish, she states it is incredible to see how the babies respond to their mother. This helps with the mother's fears of losing their baby, they may be apprehensive if they lost a baby before. The interviews were a way to find out how our state is doing to help these children. Beth informed me that she thinks the hospitals are doing a great job with the eat, sleep, console method when babies are born exposed. She also believes the psycho education for mothers on NAS helps them be mindful of what to expect, she stated, "you don't know what you don't know". Beth stated that the places we need improvement on are ending the stigma that still exists in our communities

where there are women who are parenting and there is a stigma of shame that still exists. She believes we need to work to reduce this stigma and more education in its entirety. This includes more programs accessible for parents who want help with their treatment, focusing on not only mothers but fathers in these children's lives. She explains there needs to be more programs that involve the infant. Hope on Haven hill has Abby's place which allows the mothers and babies to live in a sober living home together.

Nina DeMarco a LICSW from Amoskeag Health in Manchester, NH was interviewed. Amoskeag health has a number of different programs in line for these children. Nina explains that Amoskeag Health's robust program offers many resources to support these parents which include housing, clothing, diapers, car seats, etc. She also stated that their SUD coordinator connects families to Women, Infant, and Children programs for other similar needs like formula. Amoskeag Health also has specialty programs Nina states that help with nutrition, and other child development programs which focus on learning disabilities, autism, and behavior/emotional problems. Something interesting she mentioned was that Manchester schools also provide Behavior Consultants in the elementary schools to provide counseling support. This stood out to me because children who struggle from prenatal substance abuse exposure need help in school, as well as regulating their emotions, and strengthening their social skills. This resource is brought right to the child in school, and is beneficial to them and their education. They are offering their services right in the school, rather than at a counselling office at another location.

Nina finds the Care coordination offered from their prenatal program to be most influential. This program offers fast support around the care of the family. If the family is presented to the office, they receive immediate resources such as clothes and food. She also believes that having the ability to provide behavioral health services in a school allows the child

and staff to meet in a safe place and allows for comfort. Nina's advice for counselors and individuals working with these children is that it is the counselor's duty to report to DCYF any concerns for the child's safety and care. She says, "it is important to remember that NH law mandates any person who has reason to suspect abuse or neglect, must make a report to DCYF". It can negatively impact the family but the child's safety is priority. Through Nina's experience she found that Manchester is doing well because DCYF is prompt in initiating safety planning following a report, and is actively coordinating care with the parent's treatment program. She believes Manchester can improve by increasing support services for children which can include telehealth and in-home services, which can only happen with an increase in funds.

When working in this field, it's good to have good motivation and motivational interviewing skills, this paired with parent and child trauma informed care is so important when responding to trauma. It is very important to know about toxic stress, fight or flight, and why people do the things they do. I learned that Manchester is a great place for these treatments, they have a great demographic, and number of people and abundant of resources. If someone enters a program and it does not fit them, then there is another place they can go that can be better. Manchester is good with a continuum of care and early intervention, as well as after care, and support.

Child Parent Psychotherapy

Through my interviews I learned about the CPP intervention for children, and families. The CPP initiative stands out to me the most when it comes to interventions. CPP stands for child parent psychotherapy, this is an evidence based curriculum to work with parents and kids who went through trauma, mental health, substance abuse, etc. This program looks at parent's trauma and how they were raised, and how that impacts their children. I learned that the

intervention will be more influential when the parent is in a great place to work on it. They must be on board for stages of change. I also learned that we need more individuals and clinicians who are trained in CPP in New Hampshire. Something that would help individuals and counselors in these children's lives was to be very informed in trauma. A lot of what comes up in working with these parents and children is trauma and PTSD.

The successful intervention mentioned above is Child Parent Psychotherapy, or CPP. This is an evidence-based therapy that treats traumatic stress in children. This treatment is heavily based in attachment theory, but also includes psychodynamic, trauma, developmental, social learning, and cognitive behavioral theories, and includes the parent and child (NH Healthy Families, 2018). This treatment helps strengthen the relationships within the family, grow from their past, create hope and safety. For the mother, it helps decrease maternal depression, PTSD, and their child-rearing attitudes (Lakatos, Matic, Carson & Williams, 2019). CPP can be used on children who went through something traumatic such as, death of a loved one, separation, medical procedure, abuse at home, violence at home, different placements or caregivers, behavior problems, if a family member struggles with a physical or mental health issue, etc (NH Healthy Families, 2018).

The most important aspect of CPP sessions is the parent-child interaction, which may be seen in different ways. There are different ways we can see CPP in action. One intervention is fostering healthy coping, affect regulation, and appropriate reciprocity between the parent and child. Another way is to talk with the parent or caregiver about the issue and agree on a treatment course, as well as how to explain to the child the treatment they are about to experience. It can also include parent-child sessions, on top of just parent/caregiver sessions, each week. The sessions whether it be parent-child or just parent/caregiver include a couple focus points. These

are: concentrating on maladaptive behaviors and changing them, appropriate developmental interactions, and working with the child and parent/caregiver to have a joint understanding of the traumatic events that happened and also working to a resolution together (NH Healthy Families, 2018).

I first learned about CPP in my interviews and now after researching on my own I personally think we need more people in NH certified in this type of treatment to help these children and families. This intervention seems to be working, since it focuses on not only the child's trauma but parents as well. All while keeping the parent-child interaction alive. In order to help my community it is important to know what resources are available. I believe more CPP training in New Hampshire would help educate our employers and organizations working with these families, as well as educating the counselors on how it can help their clients. A way we can educate these workers is by offering the training to more organizations who work directly with these children and parents.

The Child Parent Psychotherapy website is a great way to start and learn more about what CPP training is about. They offer a CPP Learning Collaborative training that takes 18 months to complete. This learning collaborative comes from the National Child Traumatic Stress Network Learning Collaborative module and is for mental health professionals (Child Parent Psychotherapy, 2018). It targets mental health professionals that work with agencies and teams. They suggest teams explore their resources before officially requesting a training.

People who complete the implementation level CPP training get to be on the Child Trauma Research Program's CPP roster (Child Parent Psychotherapy, 2018). This roster highlights professionals who are focused in mental health and have a license in their state. This roster helps professionals and therapists grow in their field and with their clients. This roster

basically shows they are certified in this training. They are working to use this roster and a web map to highlight professionals who have the CPP training to make it easier for families to find a CPP resource near them (Child Parent Psychotherapy, 2018). I believe this is a great way for New Hampshire to learn the training and get more of their local counselors on the roster, all while helping our community grow.

References

Bertrand, J., Floyd, R., & Weber, M. (2005, OCT 28). Guidelines for identifying and referring persons with fetal alcohol syndrome. *Morbidity and Mortality Weekly Report: Recommendations and Reports, 54*(11). https://www.jstor.org/stable/10.2307/24842305

Centers for Disease Control and Prevention. (2020). Data and statistics about opioid use during pregnancy. *CDC*. https://www.cdc.gov/pregnancy/opioids/data.html#:~:text=Neonatal%20Abstinence%20Syndrome%20(NAS)&text=That%20is%20approximately%20one%20baby,80%20newborns%20diagnosed%20every%20day

Centers for Disease Control and Prevention. (2019). Key findings: Children born with Neonatal Abstinence Syndrome (NAS) may have educational disabilities. *CDC*. https://www.cdc.gov/healthyschools/bam/disabilities/nas-educational-disabilities.htm

Child Parent Psychotherapy. (2018). Child parent psychotherapy learning collaborative. https://childparentpsychotherapy.com/providers/training/lc/

Ganley, R & Brindley, M. (2016 Jun 9). At concord hospital, therapies help soothe opioid-exposed babies in withdrawal. *NHPR*. https://www.nhpr.org/post/concord-hospital-therapies-help-soothe-opioid-exposed-babies-withdrawal#stream/0

Hoppestad, B. (2020 May 27). Neonatal abstinence syndrome: Long-term effects. *Elite Learning*. https://www.elitecme.com/resource-center/nursing/neonatal-abstinence-syndrome-long-term-effects

Lakatos, P., Matic, T., Carson, M., and Williams, M. (2019 April 2). Child-parent psychotherapy with infants hospitalized in the neonatal intensive care unit. *Journal of Clinical*

Psychology in Medical Settings, (26), 584-596. https://doi.org/10.1007/s10880-019-09614-6

Lipari, R & Van Horn, S. (2017, Aug 24). Children living with parents who have a substance use disorder. *SAMHSA*. https://www.samhsa.gov/data/sites/default/files/report_3223/ShortReport-3223.html

Miller, J. S. et al. (2019). The effects of neonatal abstinence syndrome on language delay from birth to 10 years. *Journal Of Pediatric Nursing*, *51,* p. 67-74. https://doi.org/10.1016/j.pedn.2019.12.011

NH Healthy Families. (2018). Child Parent Psychotherapy (cpp). https://www.nhhealthyfamilies.com/content/dam/centene/NH%20Healthy%20Families/Medicaid/pdfs/Child-Parent-Psychotherapy-CPP.pdf

Oei, J.L., E. Melhuish, H. Uebel, N. Azzam, C. Breen, L. Burns, L. Hilder, B. Bajuk, M.E. Abdel-Latif, M. Ward, J.M. Feller, J. Falconer, S. Clews, J. Eastwood, A. Li, I.M. Wright. Neonatal abstinence syndrome and high school performance. Pediatrics, 139 (2) (2017), 10.1542/peds.2016-2651

Pulsifer, M. B., Butz, A. M., O'Reilly Foran, M., & Belcher, H. M. (2008). Prenatal drug exposure: effects on cognitive functioning at 5 years of age. *Clinical Pediatrics*, *47*(1), 58-65. https://doi.org/10.1177/0009922807305872

Shearer, J, N., et al. (2018 June 13). Neonatal abstinence syndrome and neurodevelopmental health outcomes: A state of the science. *Journal of Neonatal Nursing*,*24(5),* p. 242-246. https://doi.org/10.1016/j.jnn.2018.06.002

Smith, K. (2017). As opioids use climbs, neonatal abstinence syndrome rises in New Hampshire. *University of New Hampshire, Carsey School of Public Policy, Regional Brief #51. p. 1-6.*

Suchman, N & DeCoste, C. (2018 May). Substance Abuse and Addiction. US National Library of Medicine National Institutes of Health. 38(5), 17-22. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6338445/