

## **VOLUME 6, ISSUE 4 - WINTER 2012**

# THE IMPACT OF SUBSTANCE ABUSE ON THE MIND, BODY AND SOUL

There is a massive amount of scientific and anecdotal evidence that supports the belief that drugs negatively impact the mind, body and soul of those who abuse them. Much of the evidence also shows that the family and surrounding community suffers equally. In this issue of the Journal, subject matter experts explore how substance abuse affects different facets of life.

Included in this edition is a look into the world of substance abusing, at-risk women and their relationship to sexuality and trauma. This article discusses the hazards in not addressing sexuality and the importance of providing at-risk women with the tools and

knowledge they need to make informed, healthy sexual choices while in a supportive treatment setting.

Also included in this edition is a commentary piece on the problem of substance exposed newborns within a high-prevalence region of the U.S. The study discusses the changes in perceptions, structural supports, and policies that are needed to adequately address the problem of substance exposed newborns.



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The Interrelationship Between Sexuality and Drug Abuse: Sexual health as an important component in women's recovery from trauma and substance abuse

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#### **Abstract**

Sexual health for women in recovery is critical to the prevention of relapse and an improved quality of life. For women who enter substance abuse treatment programs, over 70% have histories of sexual abuse. (1,2) Yet healthcare professionals at treatment centers are reluctant to discuss sexuality while women are in treatment. This article discusses the risks in not addressing sexuality and the importance of providing at-risk women with the tools and knowledge they need to make informed healthy sexual choices while in a supportive treatment setting. Human service agencies must be proactive in providing ongoing training and supervisory and clinical support for addressing the special needs of trauma survivors.

#### **Keywords**

women, substance abuse, addiction, trauma, sexuality, recovery, sexual health

### Women, Addiction, and Sexuality

In the throes of active addiction, a woman's life can be consumed with the dire need to find, use, and conceal her drug abuse. (3) Basic survival needs of food, shelter, and safety are marginalized by the shadow of her disease. A woman impacted by drug abuse may experience a rapid decline in her

physical, emotional, and mental health. Feelings of anxiety, hopelessness, and despair may dominate her existence. Trivial as well as life changing decisions can overwhelm her.

The intent of recovery is to reinstate the woman's sense of self compromised by the disease of addiction. The pattern of vicious recycling of substance abuse and personal harm, driven by shame and guilt from addiction and/or trauma, can be replaced with the affirmation of herself as a kind, gentle, and worthy person. The recovering woman moves from knowing herself as a stranger to reacquainting herself with who she was always intended to be – self-deserving.

Women who enter drug and alcohol treatment centers frequently arrive with a long history of sexual, physical, and emotional abuse and of having used substances to self-medicate, mediate anxiety, hide their fears associated with sex, and feel sexy. (1,2,4,5,6) In decisions regarding safety and welfare such as sexuality, women affected by substance abuse often have become entangled in destructive relationships that mirror their feelings of self-contempt.

In addition, women with addiction histories fear that sober sex is not fun or sexually satisfying; therefore, they cannot imagine having sex sober. (5) Furthermore, they may have relied on sexual partners as drug suppliers, and they often do not know how to date a person without having sex with him or her. Feeling valued and respected as a person, let alone a sexual person, is unfamiliar to them.

The complexities of substance abuse, addiction, sexuality, and recovery are portrayed in the case example of Justine:

Justine was admitted to a women's residential treatment program at age 22 for multiple substance addictions (alcohol, marijuana, crack cocaine). She had turned to sex work to support her drug habits. Her boyfriend, whom she does not consider a pimp, procures tricks for her. She primarily prostitutes out of cars and has been beaten and raped by johns multiple times as well as by her boyfriend, particularly when she fails to bring in enough money to support his drug habit, crack cocaine.

Young women like Justine frequently abuse substances to cope with the stress of traumatic event(s). (7,8,9) And since usage often begins at an early age, developmentally, Justine and others like her do not cultivate knowledge of their sexuality, personal choices, values, and/or beliefs. Their self-image as a worthy person deserving of respect and recognition is often crippled by trauma and addiction. (8,9)

This results in powerlessness over communication about sexuality and sexual decisions, dissociation from feelings, difficulty with attachments or long-term relationships, sexual passivity, attraction to aggressive partners, and fear of negotiating safer sex practices. (10,11)

### **The Paradox for Treatment Centers**

All too often, in the spirit of recovery, alcohol and substance abuse programs follow the policy of asking a woman to leave her sexual self at the door. They ask women to set aside their sexuality and that it will be dealt with at a later time. In the perceived cloak and protection of recovery and sobriety, providers expect chemically dependent women to abstain from being a sexual person for a minimum of one year. They thus communicate to at-risk women who come for treatment that the central focus now is sobriety. (12)

In addition, agencies that attempt to intervene on trauma and substance abuse have limited resources, role models, and trained professionals who are comfortable and prepared to support women's exploration of their sexuality. (12,13)

Oftentimes, providers are not sure how to discuss the sexual portion(s) of recovery, are hesitant to bring up sexuality for fear that the woman may be re-traumatized, and/or are concerned that the chemically dependent woman may want to engage in sexual activities that may interfere with her recovery. (12,13)

Yet, the "no-sex and no-discussion-of-sex" policy, to which treatment centers adhere, poses a paradox: It denies at-risk women with histories of sexual trauma the freedom to reclaim a healthy sexual self, which is their birthright. However, simply by limiting any discussion of sexuality to one that is fear-based, such as fear of HIV transmission or pregnancy, (12) treatment centers are

unwittingly asking women to suppress the conflict and shame they feel regarding past sexual behaviors and experiences.

Without equipping survivors with sufficient tools, knowledge, and personal understanding of what got them to where they are in the first place, alcohol and substance abuse programs force at-risk women to efface their personal histories. They assume that survivors can magically regain their power and choice in sexual relationships.

The "no-sex and no-discussion-of-sex" policy communicates to women that it is *not* safe to discuss their sexuality. In turn, women further hide their shame and guilt, and thereby are placed at greater risk of relapse or early termination from treatment. (12)

Yet, to fully heal, survivors who have experienced wretched situations need to reveal and work through all aspects of themselves.

### Strategies for Healthy Sexuality for Women in Treatment

In treatment, survivors' ascent through the ravages of past experiences and choices often begins with a focus on their abstinence from drugs and sex. However, the noticeable lack of discussion of the interrelations of sexuality and substance abuse in the women's lives creates a very lonely and shameful existence. These conflicts may or may not be resolved outside the treatment center, making the risk of relapse readily apparent. (14)

As an alternative, when an at-risk woman like Justine enters a substance abuse program, she could be given safe opportunities to voice her story of trauma. Beginning on day one, Justine could be greeted kindly with information on the importance of sexuality and sexual health as part of her treatment process. Through discussion with her admissions counselor, she would hear, perhaps for the first time, her right to choice regarding her sexuality. She would be informed of a "sex positive approach" (12) to recovery, which views sexuality as a normal, life-enhancing experience that allows women to choose when and when not to be sexual and with whom and under what conditions.

Within a developing relationship with her therapist, Justine would then examine her own sexual past and would learn the triggers she associates with sexual encounters that include substance abuse. She would explore common indicators of trauma such as anxiety, depression, out-of-body experiences, memory lapses, difficulty sleeping, and other general reactions. (15) An information sheet on posttraumatic stress along with physical, emotional, and cognitive symptoms would be presented to her. (16) Justine would be asked to circle applicable symptoms as a concrete way for her to begin to connect any of her trauma history with drug/alcohol use and her need to numb out.

Through a psycho-educational approach, Justine would learn about the basics of sexuality, would explore positives regarding her body image, gain information on the impact of alcohol and drug use on sexual functioning, (12) and acquire the communication skills of self-efficacy, boundary management, assertiveness, negotiation, and delay skills. Components of a healthy relationship, safety planning, self-soothing strategies, and tools to manage triggers within emotional and sexual intimacy would be offered, as well. (4,5)

In this alternative approach to sexual recovery, Justine, who is in a relationship, would develop with her therapist an intimacy and sobriety plan as a means to cope with sexual trauma-and drug-linked triggers.

### **Justine's Personal Recovery Plan**

In her sexual recovery group, Justine shared the following about her planned encounter with her boyfriend, Canard:

Now that I'm about to see Canard, I realize I've been growing a lot, learning things about myself I never really knew before except in the back of my head. How scared it made me every time the johns came, even though I did it so often it shouldn't have mattered. How much I hated it when Canard wanted to have sex after a long night. I never felt like I had the right to say "No." Maybe that's why I drank so much, and why I used the drugs. . . so I wouldn't have to feel all this. It's hard to feel, hard to admit that I lived like that. Hardest of all to realize that because of that, I let go of my children, Delmar and Kacia.

When I got my first 48-hour pass my counselor and I made a plan for my meeting up with Canard.

Being in a public place was the first part, but she told me to carry a picture of Delmar and Kacia with me when I talked with him, to remind me of why I wasn't just going back to using again.

I was scared of what Canard would do, scared he wouldn't want me anymore if I tried to change things. Especially if I told him I didn't want to have sex.

"Canard," I said. "I gotta tell you some things. I've changed. I don't want us to just go back to how things were before." I tried to get the words out, tell him how I've learned I have value, how I'm learning to listen to my needs. He stopped me. "Baby you know I love you. Let's go back to my place and just be together, without all these people, you know? We can talk in the morning." He pulled me closer, and I resisted.

The picture of Delmar and Kacia was still in my hand. Somewhere in the back of my mind, I knew that I was making the choice right then between him and my kids. I saw their adorable faces like the last time I saw them, and I pulled away from Canard. I could hardly get the words out. "We're not having sex." He looked like I had just slapped him.

I grabbed my purse, holding onto the picture of my kids. His threats followed me to the door. I knew, as I walked out of that building, he would have another girl that night. The thought almost killed me. But I knew I needed to do this. I knew that it's worth it. For myself, for my children.

### **Conclusion**

To break the cycle of chronic relapses experienced by women like Justine, it is imperative to give women the right to talk about their past sexual histories which drive them to substance abuse. However, healthcare professionals may feel ill prepared and may be reticent to address the sexual trauma of at-risk women. Therefore, human service agencies must be proactive in providing ongoing training and supervisory and clinical support for addressing the special needs of trauma survivors.

It is imperative to give women with substance-abuse histories and who have been sexually exploited, a safe haven and permission to talk with their counselors and peers about their past sexual behaviors and trauma, without judgment, shame, and/or guilt. (14,17). Doing so can help women move beyond being victims of their sexual past and discover within themselves avenues to personal health and safety so that they can reclaim their pre-trauma identities as sober, happy, and healthy beings.

**Biography** 

For more than 25 years, Dr. Germayne Tizzano, owner and founder of Views From a Tree House, Inc.,

has presented nationally and internationally on trauma, drug and alcohol addiction, sexuality and

sexual health, body image, and mental health, in over 400 educational programs for health care

professionals and university students.

As President and Founder of Views From a Tree House, Inc., Dr. Tizzano offers training and

consulting in comprehensive sexual health to agencies that serve women impacted by trauma, sexual

violence, and substance abuse. Her most recent publications include a Participant Workbook and

Facilitator Guide, Sanctuary for Change, designed to provide women with histories of substance

abuse and trauma with the tools to prevent relapse and high-risk transmission of HIV/sexually

transmitted infections. In addition, Ms. Tizzano has co-authored and implemented an innovative,

skill-focused curriculum, Seeds of Inspiration, Discovery and Hope: A Training Curriculum for

Community Support Specialists, aimed at providing training to professionals on educational

technologies to improve quality of services to persons with mental health disabilities. Dr. Tizzano has

a Ph.D. in Health Education with a specialty in Preventive Medicine from The Ohio State University.

**Conflict of Interest Statement:** 

I declare that I have no propriety, financial, professional or other personal interest of any nature or

kind in any product, service and/or company that could be construed as influencing the position

presented in, or the review of, the manuscript entitled, The Journal of Global Drug Policy and

Practice.

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December 5, 2012

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"Neonatal Abstinence Syndrome: One Community's Efforts to Reverse the Trend"

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#### **Abstract**

This study discusses the changes in perceptions, structural supports, and policies that are needed to adequately address the problem of Neonatal Abstinence Syndrome (NAS) within a high prevalence region of the U.S. Misperceptions regarding the benefits of methadone maintenance during pregnancy, ongoing stigma directed toward mothers affected by addiction, and actions by court or child protective agency personnel that counter evidence-based harm reduction strategies all contribute to the pervasive challenges for pregnant, substance-abusing women and their children. A community-based program model that comprises education, a safe environment, a medically supervised medication assisted treatment, and ongoing social and professional supports provides a promising path to improve substance abuse treatment effectiveness. Issues regarding women seeking methadone maintenance and the forced choice they make between treatment and child reunification will shift the orientation from ongoing punishment to support for these women in recovery.

### **Keywords**

Neonatal Abstinence Syndrome, Methadone Maintenance

### **Extent of the Problem in the Community**

According to the National Survey on Drug Use and Health (1), in 2011 there were 6.1 million persons (2.4 percent) aged 12 or older who used prescription type psychotherapeutic drugs nonmedically in the past month, including 4.5 million users of pain relievers. Excluding alcohol, prescription drugs accounted for 83.4 percent of all drug deaths in Florida in 2011 (2). In 2011, according to the Medical Examiner in Pinellas County, Florida, there were 217 prescription drug related accidental deaths. The 6<sup>th</sup> Judicial District, which includes Pinellas and neighboring Pasco County, have one of the highest incidences in the state of Florida of prescription drug deaths (3).

### **Neonatal Abstinence Syndrome**

A consequence of this increase in prescription drug abuse is the rise of newborns born with Neonatal Abstinence Syndrome (NAS). Florida is seeing a growing number of babies born physically dependent to prescription drugs as the result of prescription drug abuse by their mothers. These babies are born suffering withdrawal symptoms such as tremors, seizures, abdominal pain, incessant crying, and rapid breathing. In many cases, doctors and nurses give these newborns methadone, the same drug used to treat heroin addicts.

Patrick et al. (4) show that, nationally, the number of babies born dependent on prescription drugs has nearly tripled in the past decade. This Journal of the American Medical Association study indicates that 3.4 of every 1,000 infants born in a hospital in 2009 suffered from NAS. The study concludes that newborns with NAS require longer and more costly hospitalization, and the estimated cost of caring for a newborn with NAS exceeds approximately \$53,000 per infant. The study notes that in Florida, where opiate pain reliever-related deaths are four times greater than all illicit drug deaths, state leaders are taking action to address the problem.

Furthermore, information from the Florida Statewide Prescription Drug Abuse & Newborns Task

Force showed a dramatic increase in babies born with NAS from 2004 to 2011, as depicted in Figure 1

(5).

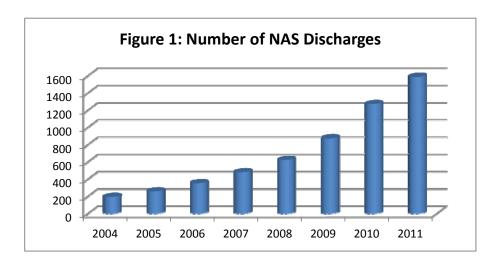


Figure 1: Number of Discharges of newborns with Neonatal Abstinence Syndrome based on ICD-9 discharge code 779.5 in the state of Florida from 2004 to 2011 (5).

As expected, the increase in the number of births displaying NAS has shown a concomitant increase in the rates of NAS per 1,000 Florida births as shown in Figure 2. In 2011, the rate peaked at 9.45 NAS births per 1,000.

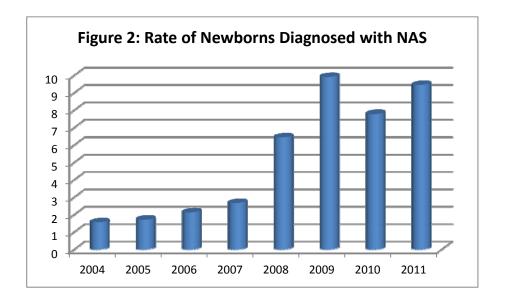


Figure 2: Rate per 1,000 births of newborns disgnosed with Neonatal Abstinence Syndrome based on ICD-9 discharge code 779.5 and 760.72 in the state of Florida from 2004 to 2011 (5).

The rates of NAS observed in the state are mirrored in Pinellas County, with one exception; Pinellas rates are higher. From 2008 to 2011, Pinellas County recorded 34,671 live births. Of those, 841 were discharged with NAS Symptom for a rate of 24.26 per 1,000 live births, a rate that is 185.4 percent higher than the state rate for the same four-year period of 8.5. In Pinellas County in 2008, 149 infants were born with NAS (infants with confirmed levels of any drug, including alcohol). That number rose to 235 in 2009, representing a 57.7% increase. In 2010, the number of newborns born with NAS dropped to 170, and then rose again in 2011 to 287, resulting in an increase of 92.7% from the 2008 number (5). In Florida, from 2008 to 2011, there were 7,380 infants born with NAS. Pinellas County, with 841 such births, accounted for 11.4% of the state total.

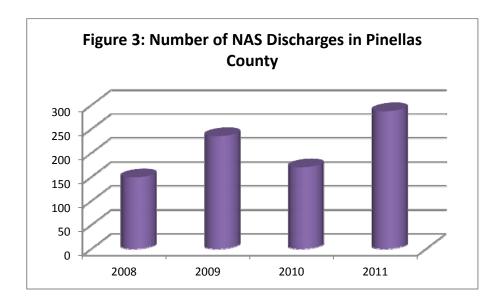


Figure 3: Number of Discharges of newborns with Neonatal Abstinence Syndrome based on ICD-9 discharge code 779.5 and 760.72 in Pinellas County, Florida from 2008 to 2011 (5).

# **Demographics**

The Statewide Task Force on Prescription Drug Abuse and Newborns tabulated NAS discharges from 2008 to 2011, and found that the babies discharged from the hospital with NAS return home to their previous living condition 89% of the time. Though this is preferable for the mother, at present it is

unknown how many of these women leave with referrals to substance abuse treatment or the extent of their support to recover from substance use.

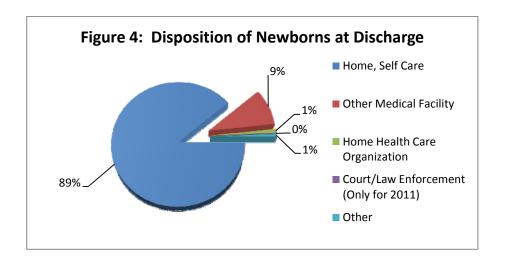


Figure 4: Disposition of Newborns with Drug Withdrawal Diagnoses at Discharge in Florida, 2008-2011 (5).

Additionally, the women who are giving birth to newborns with NAS are primarily Caucasian of non-Hispanic descent. Figures 5 and 6 illustrate that 88% are White and 92% are non-Hispanic.

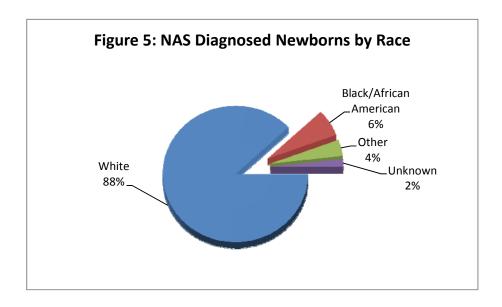


Figure 5: Disposition of Newborns with Drug Withdrawal Diagnoses at Discharge in Florida by race, 2008-2011 (5).

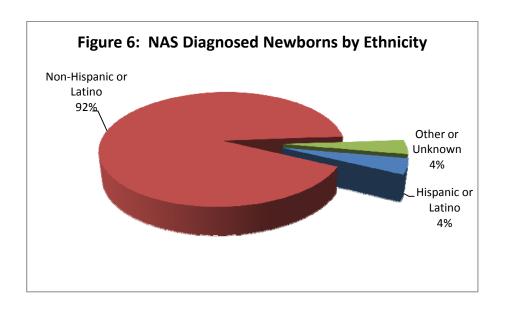


Figure 6: Disposition of Newborns with Drug Withdrawal Diagnoses at Discharge in Florida by ethnicity, 2008-2011 (5).

One issue that the data does not address is the number of babies diagnosed with NAS whose mother was on methadone and in substance abuse treatment for opiate dependence. A portion of the NAS births included in the ICD-9 codes used to tabulate these data will also include mothers who are on methadone maintenance as a way to curb their cravings for illicit or illegally obtained opioids.

Though babies will be diagnosed with NAS if their mother is in a methadone maintenance program, they are in a much better position to successfully withdraw from methadone and the mother is likewise better suited to care for her child if in treatment.

## **Efforts at the State and County Level**

Florida: Statewide Task Force on Prescription Drug Abuse and Newborns

The 2012 Florida Legislature adopted legislation creating a task force to examine the extent of prescription drug abuse among expectant mothers, as well as the costs of caring for babies with neonatal abstinence syndrome, the long-term effects of the syndrome, and prevention strategies. The Prescription Drug Abuse & Newborn Task Force examines and analyzes prescription drug-driven NAS, evaluates effective prevention and treatment strategies, and submits its findings and proposals to the Florida legislature. The objectives of the task force include the following:

1. Collect and organize data concerning the nature and extent of neonatal abstinence syndrome

from prescription drugs in Florida;

2. Collect and organize data concerning the costs associated with treating expectant mothers and

newborns suffering from withdrawal from prescription drugs;

3. Identify available federal, state, and local programs that provide services to mothers who

abuse prescription drugs and newborns with neonatal abstinence syndrome;

4. Evaluate methods to increase public awareness of the dangers associated with prescription

drug abuse, particularly to women, expectant mothers, and newborns;

5. Examine barriers to reporting neonatal abstinence syndrome by medical practitioners while

balancing a mother's privacy interests;

6. Assess evidence-based methods for caring for a newborn withdrawing from prescription drugs

and how nurses can assist the mother in caring for their child;

7. Develop a compendium of best practices for treating both prescription drug addicted mothers

and infants withdrawing, both prenatal and postnatal; and

8. Assess the current state of substance abuse treatment for expectant mothers and determine

what best practices should be used to treat drug addicted mothers.

In 2012, the Prescription Drug Abuse and Newborns Task Force launched efforts to determine the full

extent of the neonatal abstinence syndrome in Florida. Much of that data is presented in this report. By

the start of the 2013 legislative session, the task force will provide lawmakers with a series of policy

recommendations on how to address and correct the problem.

Pinellas County: Substance Exposed Newborn Task Force

The Healthy Start Coalition of Pinellas County initiated the Substance Exposed Newborn Task Force

in July of 2011. The Task Force has brought together community participants from the Pinellas

County Juvenile Welfare Board, substance abuse treatment providers, Head Start, local colleges and universities, All Children's Hospital and a number of area hospitals providing birthing services.

# **Efforts to Educate Pregnant, Substance-Abusing Women**

Motivating New Moms

One strategy to address the increase in NAS newborns is to identify and educate pregnant women who are abusing drugs. Because of the harmful effects substance use has on the fetus, it is important to engage women as early as possible in their pregnancy and provide services and education to assist them. The Motivating New Moms (MnM) program was designed to help pregnant substance-abusing women gain knowledge and understand what to expect during a methadone maintenance program. Additionally, the program is intended to alleviate the fears of the enrolled women regarding how methadone will affect their children. The program also lends support to the women by helping them overcome the stigma that is often placed on them by health care workers with little understanding of addiction or the benefits of participating in a methadone maintenance program. Lastly, the program provides support and encouragement to postpartum mothers, so that they may be successfully treated for their addiction in the long term.

The first obstacle facing the staff in MnM is to engage the women who are not very motivated to seek treatment. The counselors work hard to gain their confidence and establish positive, healthy, and nurturing relationships. Next, the counselor will work to assure a secure environment, help the women to connect as a support group, and disconnect them from unhealthy relationships that most likely were contributing factors to their addiction. In many cases after giving birth, these women will return to that environment.

The mission of MnM is to provide a system of care to 1) assist mothers who have delivered an NAS infant in accessing treatment and learning effective parenting skills; 2) identify drug-using women during pregnancy to link them with appropriate treatment; 3) provide drug, trauma and parenting groups for parents identified by the Child Welfare System; and 4) provide Case Management Services for families with children at risk of removal.

The program maintains relationships with Pinellas Hospital Neonatal Intensive Care Units (NICUs) and Federally Qualified Health Centers (FQHCs). Their role is to provide Screening, Brief Intervention, Referral and Treatment (S-BIRT model) for pregnant women and women who have delivered a newborn with NAS. The program also provides parenting education and support groups for these women and assists participants to engage in treatment. Lastly, the program provides case management services to appropriate women involved in referral or supervision through the Child Welfare System.

Since June, 2012, the Motivating New Moms program has received 110 referrals. Of those, 88 (80.0%) have enrolled in the program. Of the 110 referrals, 95 are from methadone maintenance programs. Of the 88 enrolled in the program, 21 (23.9%) have enrolled in other intervention/treatment programs.

### The Role of Methadone Maintenance During Pregnancy

Women who are pregnant and addicted to opioids have the following four choices:

- 1. Keep abusing the drug of choice;
- 2. Try to quit using and suffer through withdrawal and detoxification;
- 3. Enter a medically supervised withdrawal or
- 4. Get into an opiate substitution program and use methadone or buprenorphine.

The first three choices are not advised. Continuing to abuse drugs subjects the fetus to many environmental risks, including disease, and a reduced likelihood that mothers will take good care of themselves during pregnancy. Trying to quit on your own is also very risky. Experiencing the painful and stressful symptoms of opiate withdrawal, medically supervised or not, results in muscle aches, insomnia, sweating, agitation, diarrhea, nausea, vomiting and, most important, abdominal cramping, and is extremely risky for the fetus. The risk of miscarriage is very high. (6)

The fourth choice, enrolling in an opiate substitution program and getting on methadone or buprenorphine, is the best alternative. Some of the specific reasons for enrolling into a methadone treatment program include the following: (6, 7)

- If not on methadone, withdrawal from opioids causes muscles to be overly active (such as a
  women's uterus), thus resulting in premature labor and/or premature delivery due to muscle
  spasms/contractions;
- If not on methadone, withdrawal can also result in increased activity of the nervous system, thus the stress hormone system creates an adverse in utero environment;
- Women not on methadone and experiencing withdrawal are more likely to revert to using
  illicit or illegally obtained opioids to alleviate the withdrawal sickness and in turn harm their
  unborn child by exposing him/her to uncontrolled exposures as opposed to a controlled
  monitoring state with methadone maintenance;
- Women on methadone will fully suppress symptoms of withdrawal and eliminate drug hunger (cravings);
- Women on methadone normalize physiologic functions disrupted by drug use;
- Though it is known that methadone exposed babies may have a slightly lower birth weight
  than a non-methadone exposed baby, this can be avoided by proper pre-natal care, nutrition,
  stabilizing doses of methadone and abstinence from other substances, alcohol and cigarettes;
- A woman on methadone decreases risky behaviors and increases participation in pre-natal care;
- A woman on methadone will improve maternal nutrition and in turn ensure a safe and stable living environment;
- A woman on methadone has a greater probability of reducing obstetrical complications and minimizing fetal drug exposure;

- A women undergoing methadone treatment has made the first step in recovery and in turn
  increased the probability that she will keep custody of her child after delivery; and
- Once born, a newborn with NAS delivered by a woman on methadone maintenance can easily be detoxified and assisted through withdrawal using methadone or a morphine titration.

In short, methadone maintenance reduces adverse pregnancy outcomes, reduces adverse birth outcomes, provides a medically supervised medication assisted treatment for the infant and shows no long-term adverse neurobehavioral consequences to *in utero* exposure. Additionally, Hospital Obstetric Units are prepared to begin NAS protocols because they know the woman is in treatment and the baby will likely be born with NAS, rather than instituting treatment when symptoms occur. As pointed out by Zweben and Payte (8), "It is a popular myth that methadone withdrawal is more severe than any other. In reality, because of the long plasma half-life, the abstinence syndrome develops slowly, is of moderate intensity, and lasts a long time. Heroin or morphine addiction, on the other hand, results in a rapid onset of a more intense withdrawal that is fairly brief in duration." Methadone exposed infants are within the normal range of development and do not differ in cognitive function from non-exposed infants matched for socio-demographic, biological, and health factors.

Misconceptions About Using Methadone While Pregnant

#### **Breast Feeding**

It is wrongly believed that women on methadone should not breastfeed. For example, a source on the internet states "Methadone can pass into breast milk and may harm a nursing baby. Do not use this medication without telling your doctor if you are breast-feeding a baby" (9).

This assertion is incorrect. Bogen et al. (10) concluded that "...our data support the 2001 American Academy of Pediatrics statement that mothers on high methadone doses should be supported to breastfeed if they remain in and adherent to their comprehensive methadone treatment program."

Jannson et al. (11) concluded "In general, these results support the recommendation for breastfeeding among methadone-maintained women if it is appropriate and desired."

Methadone Dose Affects Newborn Withdrawal

It is wrongly believed that methadone will harm a newborn baby in the form of greater doses leading to more severe withdrawal. Again, the internet provides inaccurate information. "It is not known whether Methadone will harm a fetus. Methadone may cause addiction or withdrawal symptoms in a newborn if the mother takes the medication during pregnancy. Tell your doctor if you are pregnant or plan to become pregnant while using Methadone" (12).

In a report by Berghella et al. (13) they concluded, "The maternal methadone dosage does not correlate with neonatal withdrawal; therefore, maternal benefits of effective methadone dosing are not offset by neonatal harm."

### Judicial Rulings

Lastly, another issue which adds to the stigma of a pregnant, substance-abusing woman that subsequently affects her decision to enter a methadone maintenance program is the fear of actions by courts or child protective agencies. According to evidence compiled by the National Advocate for Pregnant Women, "judges and social workers routinely override decades of medical evidence by forcing ex-addicts to either stop the treatment that works for them or give up their children. Similarly, drug courts across the country either prohibit maintenance as a treatment option or compel those on it to quit and get "real treatment." Such bureaucratic arrogance is permissible because those affected are people with addictions" (14, 15).

### **Summary:**

The rise in prescription drug abuse has affected the country and drastically affected the state of Florida and Pinellas County in particular. Through efforts at the state and local level, programs and task forces have been developed to address the effects of prescription drug abuse and more pointedly the innocent victims of substance abuse, the fetuses. Neonatal Abstinence Syndrome has increased dramatically

over the past four years in Florida and Pinellas County. Though programs such as Motivating New Moms and medication assisted treatment programs are important to help pregnant, substance-abusing women, there are other points to consider. In some cases, a woman may need to be in residential treatment for her own safety and for the safety of her unborn child or newborn. Residential treatment provides the woman a safe environment and helps her to build social supports. Furthermore, it provides a system to override the guilt and fear of having her baby. Regardless of the treatment modality, it is important to understand that the primary objective is the safety of the fetus and the mother.

# **Brief Author Biography**

Mark A. Vargo, Ph.D. – Dr. Vargo is the Vice President of Research and Evaluation for Operation PAR, Inc. He received his BS from the University of Pittsburgh and a Ph.D. in Biology from the University of Illinois at Urbana-Champaign. In his current capacity with Operation PAR, he oversees the evaluation of federal grant programs, pharmaceutical clinical trials and agency outcome measures. Dr. Vargo is also the evaluator for the LiveFree! Substance Abuse Coalition of Pinellas County, Florida and serves on the Florida Behavioral Health Epidemiology Workgroup.

Jackie Griffin, MS - Jackie Griffin, MS, is the Vice President of Development at Operation PAR, Inc. She has 22 years expertise in advocacy, leadership, sustainability planning and grant development for non-profit organizations and coalitions. She has taught as adjunct faculty at Springfield College, School of Human Services Tampa Campus for a decade. During her 17 year tenure at Operation PAR, as Vice President of Development, Ms. Griffin has worked with a team to secure more than \$41 million in competitive grant awards. Jackie serves as Executive Director for the LiveFree! Substance Abuse Prevention Coalition of Pinellas County and has contributed 13 years of leadership to area non-profits and organizations. As Executive Director, Ms. Griffin is assisting the LiveFree! coalition in Building a responsive Recovery Oriented System of Care in Pinellas County. Ms. Griffin is on the Florida Coalition for the Homeless Board of Directors, Floridians for Recovery, St. Petersburg College Health and Human Services Advisory Board, the Florida School of Addictions Studies Board of Directors and the Florida Coalition Alliance, Board of Directors, Vice Chair. She was selected by the Substance Abuse Mental Health Services Administration as one of the nation's first associates of the Women's Addictions Services Leadership Institute, graduating in October 2009.

**Peter E. Gamache, Ph.D., MBA, MLA, MPH** - Dr. Gamache is a research and development specialist for health services organizations, private foundations, and public service systems. In his current capacity as the President of the Turnaround Achievement Network, he is a designer and evaluator of system of care initiatives including substance abuse, homeless, suicide prevention, juvenile justice/criminal justice, primary health care, family reunification, disabilities/vocational rehabilitation, and HIV/AIDS outreach, testing, and treatment programs.

#### **Conflict of Interest Statement:**

I declare that I have no proprietary, financial, professional or other personal interest of any nature or kind in any product, service and/or company that could be construed as influencing the position presented in, or the review of, the manuscript entitled, "Neonatal Abstinence Syndrome: One Community's Efforts to Reverse the Trend."

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