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Perinatal Drug Abuse Intervention: Policy Development for Drug Screening

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Abstract

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MS, University of North Dakota 2011

BS, Bemidji State University, 2009

Project Submitted for Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Perinatal drug abuse is becoming a profound issue facing the health and wellbeing of neonates. The community serviced by the project site, which lies within the boundaries of an Indian Reservation, suffers from perinatal drug abuse at a higher rate than state and federal averages. The purpose of this project was to provide the project site with a policy to consistently screen for perinatal drug abuse. Lave's theory of situational learning and the Sanford Way model for quality improvement framed this project. To guide policy development, data were compiled through a systematic review of current literature, national and state guidelines, state law, local tribal government, and community stakeholders. Data included: (a) studies completed in the past 10 years specifically targeting drug abuse in child-bearing aged women, with intentional exclusion of tobacco and alcohol studies; (b) prevalence of illicit drug abuse in child bearing aged women at a local, state, and national levels; and (c) local, state, and national guidelines, as well as state law, for perinatal drug abuse intervention and screening. In addition, interviews and meetings with local stakeholders were completed and their feedback was incorporated into the development of the perinatal drug abuse screening and intervention policy. To evaluate policy effectiveness, it is proposed that perinatal drug screens ordered at the project site be monitored for six months prior to and after implementation of the new policy. The desired outcome will be that providers consistently intervene with perinatal drug abuse in a non-biased fashion. This quality improvement project will create a positive social change by allowing non-biased intervention with perinatal drug abuse using evidence-based practice and by promoting nursing-driven policy development.

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Dedication

To place into words a dedication, it seems impossible to do. To my mother, she has always taught me to work for what I want, and to be who I am. She is the first person I turn to when I need a shoulder, ear, or hand. She has taught me to be tough, smart and solid. To my husband Darrin who has smiled and said “okay” every time I take on another project, program or goal. You have given me everything I need to go on, you’re my safe harbor. To our children Meghan, Christian and Hunter, you are everything bright and beautiful in my life.

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Section 1: Nature of the Project

Section 1

Introduction

It was not until the early 1970's that teratogens such as alcohol were identified as causing adverse infant outcomes, and it was not until 1990 that the Alcohol Beverage Labeling Act of 1988 went into effect. This was the first intervention by the Surgeon General focusing on substance abuse of pregnant women (Grant, 2009). According to the literature, little has changed since the discovery of this public health concern. There are more deaths, illnesses, and disabilities from substance abuse than from any other preventable health condition (Healthy People, 2010). Perinatal drug abuse has become a recognized health disparity of epidemiologic proportions (ASTHO, 2014). Infants exposed to drugs during pregnancy can be diagnosed with neonatal abstinence syndrome (NAS), requiring extensive medical treatment at birth and beyond. In the US, NAS rates increased from 1.2 per 1,000 infants to 3.9 per 1,000 infants in 2009 alone (ASTHO, 2014). There has been a 33% increase in non-medical, opioid pain reliever use among pregnant women in the past decade (ASTHO, 2014). Early treatment and intervention is the key to successful outcomes for infants affected by substance abuse. Many studies show that substance using women, particularly cocaine or opiate users, are significantly less likely to obtain prenatal care (Schempf, 2009) and that substance abuse during the preconception period predicts substance use during the prenatal period (Floyd, 2008).

Background

Perinatal drug abuse is a growing problem for all communities in the United States. The healthcare facility for this project is a critical access emergency department, hospital, and rural health clinic located in northern Minnesota. The county in which the facility lies is within the borders of an Indian Reservation. The project facility does not currently have a policy on perinatal drug testing or perinatal drug use intervention. The purpose of this project is to develop a policy to guide health care providers to test for and intervene in perinatal drug abuse.

Facilities such as the project facility may be the only contact mothers have with health care during their pre-conception, perinatal, and postnatal care states. It is very important for health care providers to recognize the symptoms of drug abuse in women of child bearing age and to have a policy for testing and intervention

Problem Statement

The state of Minnesota has been consistently ranked one of the lowest infant mortality states in the US (MDH, 2013). However, Minnesota's American Indian children have a twofold greater incidence, compared to any other ethnic group of infant mortality in their first year of life (MDH, project site, 2013). The county where the project site is located has the highest rates of teen pregnancy, sexually transmitted diseases, and drug and alcohol abuse among child bearing-aged women and the lowest number of primary care providers per capita in the state (MDH, 2013). According to the State Substance Use Report (2014), the students and adults in the county where the project site resides are "considerably more likely to use tobacco, alcohol, illicit drugs and

marijuana" (more than double the state average in all areas) than any other resident in the state (SUMN, 2014).

Purpose Statement

According to Association of State and Territorial Health Officials (ASTHO) (2014), "taking a public health approach to routine screening for unhealthy substance use in women at every healthcare visit can help increase the opportunities for primary prevention" (p. 2). The purpose of this project is to develop a healthcare facility policy to guide health care providers to test for and intervene in perinatal drug abuse.

Project Goals and Objectives

The goal for this project is to develop a policy for the project site that will enable providers (Nurse Practitioners and Physicians) to objectively screen child-bearing aged women for drug abuse, by providing hospital and emergency department caregivers the policy support needed to test for, and intervene with, positive drug screens.

Currently, the project site does not have a policy that will guide providers in perinatal drug screening. This makes providers vulnerable to the assumption of bias when testing or intervening with perinatal drug abuse. Globally, this project will remove those assumptions of bias and give providers the support needed to properly intervene in perinatal drug abuse. Specific objectives for this project will be to develop a perinatal drug abuse policy based on National Guidelines established by the American Academy of Pediatrics, American Academy of Obstetrics, Registered Nurses Association of Ontario, evidence (Cochrane reviews), state law, and local tribal government recommendations.

After graduation, future plans will be for project site leadership to implement the policy system-wide for all health care providers to follow, as well as develop a formal education program for all healthcare providers that will expand their understanding of perinatal drug abuse. This quality improvement project will have future goals to lead this facility towards a program that will (a) identify health care providers' current philosophy on drug screening, (b) educate providers on the need for a policy to manage perinatal drug abuse, (c) develop a policy for all emergency room and hospital providers to test for perinatal drug abuse, and (d) establish a protocol for intervention when perinatal drug abuse is diagnosed.

Theoretical Framework

Lave and Wenger developed a learning theory based on the assumption that individuals learn according to the situation they are in and that there is a direct correlation between learning and the situation the individual is in (Wenger, 1991). Laves Theory of Situation Learning will be used as a theoretical framework when developing the project. Laves theory implies that learning requires that the context of information be presented as authentic and that it take place in settings and situations in which it would normally occur (Knowledgebase, 2011). Laves theory is a practice theory and requires interaction between all parties. (Knowledgebase, 2011).

Significance to Practice

Nurses are not typically strong in policy development and are historically known to "shy away from leadership opportunities" (Mason, 2013, p. xxvii). Doctorate-prepared nurses are called upon to lead their field in policy development and social change.

Development of system policy, by nurses, will positively impact the future of nursing mentorship within the nursing profession. Nursing is working diligently to develop a culture of nursing mentorship within this profession that goes above and beyond the individual and organizational level (Montavlo, 2015).

Evidence-Based Significance

The need to screen, test, and intervene with perinatal drug abuse is a lake filled with murky water for practicing providers. Prescription drug abuse in the US alone has reached epidemic proportions. McHugh (2015) stated "The rapid escalation of this problem initially far outpaced clinical research on its nature and on interventions to prevent and treat prescription drug use disorders" (p. 2). Providers are unclear of their role in perinatal drug abuse and are in need of evidence-based policies that will guide their assessment and intervention of this epidemic problem.

Implications for Social Change

The Child Abuse and Prevention and Treatment Act (CAPTA) was amended in 2003 to include the "Keeping Children and Families Safe Act" which allows funding for states contingent on their establishment of procedures that keep safe infants born to illicit drug abuse (Farst, 2011). This act provides protection to providers to screen for drug abuse in pregnancy, but leaves the decision of who and when to test at the discretion of the provider. Farst (2011) stated objective protocols are needed to avoid bias towards newborns of minority or poverty backgrounds. To avoid the suspicion of provider bias, every healthcare facility should develop a policy to address perinatal drug abuse testing (Farst, 2011).

Definition of Terms

The principal terms used throughout this QI project are defined next.

Perinatal: According to the World Health Organization (WHO), perinatal period begins at 22 weeks gestation and ends at 7 days post-partum (WHO, 2013).

Illicit drug abuse: For this purpose of this project, illicit drug abuse is limited to marijuana, opiate (prescription as well as non-prescription), methamphetamine, and other illegal chemicals for mood alteration.

Critical access hospitals (CAH): Are rural hospitals that meet defined criteria outlined by the federal government and are reimbursed by cost-based measures (Center, 2011).

Screening: For the purpose of this project refers to the process of determining drug abuse in women in the perinatal period. Screening involves assessment of findings, lab testing, and history and physical exam.

Neonatal Abstinence Syndrome (NAS): Is a syndrome of symptoms noted in infants during the perinatal period that is caused from a sudden cessation of exposure to illicit drugs. NAS is diagnosed by using the Finnegan Scoring System (Kocherlakota, 2014).

Limitations and Assumptions

Limitations to development of a perinatal drug abuse policy at the project site are related to provider acceptance of policy and professional collaboration. Team approach is a strategy that will help facilitate physicians, nurses, and all other stakeholders engaged in perinatal drug abuse prevention, to work collaboratively to improve patient outcomes

(White, 2012). Assumptions for this quality improvement project are that the policy is designed specifically for the need of one facility, and that the goals, mission and vision of this project align specifically with this one facility. Limitations also include the fact that the DNP student researcher of this project is employed at the facility this program is being designed for. This will potentially create personal bias due to previous experience working with perinatal drug abuse in this facility. Although this is a limitation, it can also be a benefit in that the DNP student is familiar with providers, facility processes, and the population served.

Summary

The project site is currently without a policy that can be used by emergency room and hospital providers when intervening with perinatal drug abuse. There is a need for a site-specific policy that will guide providers to intervene with perinatal drug abuse. Without a policy for intervention in place, providers are subject to accusations of bias. A perinatal drug abuse policy will provide an avenue for early recognition and intervention with drug abuse in all child bearing aged women.

Section 2: Review of Literature and Theoretical and Conceptual Framework

Literature Review

Specific Literature

Perinatal drug abuse and infants born with NAS have increased at an alarming rate in the US (Patrick, 2012). The project site does not currently have a policy that guides health care providers to screen, test, or intervene with perinatal drug use. Without a facility policy in place, it is left up to the discretion of the provider to determine the need for testing, relying on personal judgment (Birchfield, 1994). The project site is a critical access hospital and ED in an underserved, high risk county that was ranked the "least healthy county" in its home state in 2014 (Robert Wood Johnson, 2014). Testing and screening for perinatal drug abuse is critical to intervention (ASTHO, 2014). The purpose of this project is to develop a policy that will guide health care providers at the project site to screen and test for perinatal drug abuse and intervene when needed.

Literature Search and Strategy

Ten databases were used for the purpose of searching the literature. Google Scholar, Mayo Clinic, Sanford Health, Walden University Library database search of CINAHL, PubMed, MEDLINE, Nursing and Allied Health Score, and the Cochran Database of Systemic Reviews were searched. Key search terms used were

- testing for drug abuse in pregnancy
- health policy drug abuse
- pregnancy drug abuse
- pregnancy testing policy

- perinatal testing policy
- neonatal abstinence syndrome
- illicit drug abuse pregnancy
- pregnancy outcomes
- drug abuse pregnancy risk factors
- Minnesota statues perinatal drug exposure
- perinatal drug abuse

The scope of the literature review for this paper was broad. Early literature on NAS and policy needs were found in the late 70s- early 90s. The majority of the literature used was collected from 2000- 2014.

It is noted that a Tribal Chairwoman announced at the 14th annual Communities Collaborative Brain Development Conference (held August 12-14, 2014) that 80% of all Native American babies born at two local birthing centers were positive for drugs. This is important to the findings for this paper as the project site lies entirely within the borders of and Indian Reservation, and is the only hospital and ED on this reservation. During the search for information it was noted that statistics and specific data regarding tribal members are protected, often not shared with non-tribal affiliates, or not collected at all. For the needs of this project, the evidence, literature and databases searched, were done so at a national, state, and county level and applied to this community. National, state and county data were reviewed for the purpose of this proposal, has been aggregated and extrapolated to fit this needs of this specific site.

General Literature

Neonatal abstinence syndrome is a diagnosis given to infants born with specific symptoms of drug withdrawal at birth (Finnegan, 1974). The most commonly utilized tool for diagnosis of NAS is the Finnegan scoring system (Kushel, 2007). The Finnegan scoring system is a system that allows a health care provider to identify and score specific withdrawal symptoms. A Finnegan score above 7 typically indicates the need for treatment of NAS (Kushel, 2007). In the past decade there has been a significant rise in the number of US births diagnosed with NAS. Diagnosed cases have rose from 1.2 per 1,000 US births to 3.39 per 1,000 births. (ASTHO, 2014). More than 13,000 infants were born with drug withdrawal symptoms in 2009, which means approximately one infant is born with NAS every hour in the US (ASTHO, 2014). This is likely not a true representation of the number of infants born with NAS, as maternal drug abuse is under-reported, there is commonly no prenatal care, infants are born outside of a health care setting, and Finnegan scoring is subjective to user assessment (Houdak, 2012). In 2013 The Department of Health & Human Services, Substance Abuse and Mental Health Services (SAMHSA), released the results from their 2012 National Survey on drug abuse and reported that among pregnant women, aged 15 to 44 years, 4.0% used illicit drugs in the past month, 11.8% reported current alcohol use, 2.9% reported binge drinking, and 16.5% of pregnant women used tobacco in the last month.2 In the United States, nearly 90% of drug-abusing women are of reproductive age. Substances most commonly abused during pregnancy include cocaine, amphetamines, opioids, marijuana, ethanol, tobacco, caffeine, and toluene-based solvents.

Great controversy surrounds perinatal drug screening. The need for policy to guide testing has increased as the number of infants born with exposure has increased. In an early study on the need for policies to test for drug abuse in pregnant women, Birchfield (1994) stated, "the process by which pregnant women and infants are selected for illicit drug testing has caused concern because it may lead to bias and overrepresentation of certain populations in the drug-using groups." (p. 211). The Association of State and Territorial Health Officials (ASTHO) suggested that "taking a public health approach to routine screening for unhealthy substance use in women at every healthcare visit can help increase the opportunities for primary prevention" and recognizes the following lifetime frames as key time frames for interventions "preconception, during pregnancy, at birth, postpartum or neonatal/infancy period, and childhood and beyond" (ASTHO, 2014, p.3).

Lindsay (2013) recommended "parturients identified as drug users" receive a comprehensive management approach involving both "high risk obstetrics, and comprehensive counseling" (p. 140). Recognition of this profound social problem has healthcare leaders pushing for universal screening of all child bearing aged women, and certainly for all pregnant women. ASTHO (2014) stated:

> States can support the American Congress of Obstetricians and Gynecologists' (ACOG) recommendation for universal substance use screening in early pregnancy in a variety of ways. State agencies, quality improvement efforts, and perinatal collaborative can advance prenatal screenings as the expected standard of care for obstetric providers. State health agencies can ensure that Medicaid

reimburses for substance abuse screening, support provider education and training, and streamline entry points for substance abuse treatment. Need page number

The literature regarding perinatal substance abuse has proved consistent results. There is a national, as well as, global need for interventions surrounding perinatal substance abuse. In addition, there is a need for further screening and policies for drug screening and testing, which are specific to women, and pregnant women. For the purpose of this study, emphasis will be placed on those studies that only address substance abuse in pregnancy and reproductive aged women.

Perinatal Drug Abuse Studies

The following review will examine: (a) five quantitative research studies conducted by Azadi and Dildy (2008), Pinto et al. (2010), Schempf and Strobino, (2009), Smith et al. (2009), and Vucinovic et al. (2008); (b) two qualitative studies by Nueshotz and Fitzpatrick (2008) and Walkup et al. (2009); and, (c) two meta-analyses conducted by Greenfield et al. (2010) and Howell et al. (1998).

Purposes

One quantitative and one qualitative article focused on identifying the prevalence of substance abuse, as well as, factors that interfere with screening and intervention of substance abuse problems (Azadi & Dildy, 2008; Neushotz & Fitzpatrick, 2008). Two quantitative studies focused on the contribution of substance abuse to negative outcomes in pregnancy (Pinto et al., 2010; Vucinovic et al.. 2008). Two quantitative studies focused on the correlation of maternal substance abuse and little to no prenatal or mental health

care (Schempf et al., 2009; Smith et al., 2009). The purpose of one qualitative study was to evaluate the efficacy of a home-visit intervention program among young, reservation based American Indian mothers and their increased parenting knowledge, including a reduction in perinatal substance abuse (Walkup, 2009).

Designs

Due to the nature of perinatal substance abuse and the fear of stigmatization and discrimination, many pregnant women keep the use of illicit drugs from their providers. Because of this, it is not surprising that the large majority of controlled studies are retrospective cohort studies (Azadi & Dildy, 2008; Neushotz & Fitzpatrick, 2008; Pinto et a.., 2010; Schempf & Strobiono, 2009; Smith et al., 2009; and Vucinovic, 2008). All six of the retrospective studies were longitudinal with durations ranging from four months to ten years. One research study used a longitudinal, double blind trial of a home based intervention for young reservation based American Indian mothers (Walkup, 2009).

Samples

Sampling refers to the way study participants are selected, and a sample refers to the segment of a population that is selected to participate in the study (Rubin, 2008). Many of the quantitative studies had large sampling sizes. For example, Vucinovic et al. (2008) looked at statistical data from 43,181 deliveries at Split University Hospital in Croatia, this was the only study noted using data from outside the US. This sampling method resulted in a study sample of 85 mothers that continued in the study. The samples in the quantitative studies varied greatly from 85 in the study by Vucinovic (2008) to 812

in the study by Schempf (2009). Of the randomized controlled trials, one had a sample size of 167 (Walkup et al., 2009) and one study did not clearly identify the sampling process or the sample size (Neushotz & Fitzpatrick, 2008).

Methods and Measures

Methods and measures varied between the studies. Three of the quantitative articles specifically noted only using data analysis (Pinto et al., 2010; Schempf & Strobino, 2009; Vucinovic et al., 2008). The data gathered and analyzed by Pinto et al., (2010) came from patients' records and specifically focused on demographic details, smoking, and past and present history of drug use, current antenatal problems, and self-reported or clinically discovered substance use. Schempf and Stobino (2009) focused on data pertaining to low income, one or no prenatal visits, and positive drug screens. Vucinovic et al., (2008) analyzed data on all pregnancies complicated by illicit drug use over a 10 year period at Split University Hospital.

Azadi and Dildy (2008) screened pregnant women who delivered at University Hospital in New Orleans in the first four months of 2005. On admission for labor, women were screened by urine toxicology testing for substance use. Demographic, labor, and outcome data were obtained from the records of those patients who tested positive. Those patients were also interviewed at the hospital during their labor admission. Those with positive urine toxicology screens and negative delivery outcomes were included in the sample. In the study by Smith et al. (2009), pregnant and postpartum women who tested positive underwent a diagnostic evaluation, were provided at least one mental health referral, and were encouraged to seek treatment for substance abuse, as well as,

depressive disorders. Follow up evaluations were done on these women at one month, three months, and six months. Logistic regression was used to estimate the relationship between clinical and psychosocial factors and self-reported mental health service use.

The qualitative studies had two different methods and measures. Neushotz and Fitzpatrick (2008) conducted interviews with the clinic staff from a major metropolitan academic hospital in New York City. The staff included Physicians, Resident Physicians, one Social Worker, and seven Registered Nurses. The initial interview was conducted with the Director of Nurses and the Medical Chief. Notes, reflections, and recordings of the meetings between the clinicians were analyzed extracting information on adherence to current practice guidelines regarding substance abuse screening. Walkup et al. (2009) conducted a study of expectant American Indian mothers aged 12-22 years randomized into one of two home visit intervention groups. The intervention began during pregnancy and continued to six months postpartum. They focused on prenatal and newborn care with specific emphasis on substance abuse, among other things. Mothers and children were evaluated at baseline, two months, six months, and twelve months post-partum.

Approaches to Analysis

Data were collected and recorded in a number of different data bases. Stata was used by Pinto et al. (2010), Microsoft Office Access was used by Azadi & Dildy (2008), and Vucinovic et al., (2008) reported using SPSS 10. Five studies reported using the chi-square test to determine bivariate associations between factors, namely the variables and controls. Four of the five studies using the chi-square test were quantitative (Azadi & Didly 2008; Pinto et al., 2010; Schempf & Strobino, 2009; Vucinovic et al., 2008) and

one study was qualitative (Walkup et al., 2009). Of these studies, the p value benchmark for establishing statistical significant was <0.05. The Mann-Whitney rank sum was also used for normally distributed and skewed data in the Azadi and Dildy (2008) and Pinto et al. (2010) studies, and for statistical data analysis of quantitative data in the Vucinovic et al., (2008) study. The Smith et al. (2009) study used multivariate analysis to categorize variables between pregnant and post-partum women.

Findings

Three of the qualitative studies focused on negative pregnancy outcomes related to substance abuse. The three studies by Azadi and Dildy (2008), Pino et al. (2010), and Vicinovic et al., (2008) resulted in similar findings, and noted there were a significant number of births affected by substance abuse. Pino et al. (2010) stated that (19)% of pregnant women screened positive for drugs. According to Pinto and colleagues (2010) adverse fetal outcomes were most likely to occur when illicit substances were used during pregnancy and manifested most commonly as low birth weight, and placental abruption.

Five of the studies focused on treatment and screening. Three of the studies were quantitative (Pinto et al., 2010; Schempf & Strobino, 2009; Smith et al., 2009) and two were qualitative (Neushotz & Fitzpatrick, 2008; Walkup et al., 2009). The results of three studies were similar (Neushotz & Fitzpatrick,2008;, Schempf & Stobine,2009;Smith et al.2009); all found there to be limited screening, as well as, limited prenatal care for substance abusing mothers. Of those mothers who were screened and tested positive for drug use, there were neither interventions nor treatment programs available to pregnant or

postpartum women. Walkup et al. (2009) found evidence to support an in-home intervention for pregnant, American Indian women. This study followed the success rates of an in home perinatal support group that provided evidence of decrease in the number of positive perinatal drug screens in mothers that completed the program.

Two literature reviews were also used for the purpose of strengthening an understanding of the available data. Greenfield et al. (2006) examined the literature containing characteristics associated with treatment outcomes in women with substance use disorders and found that women with substance use disorders are less likely over their lifetime to enter treatment compared to their male counterparts. Howell et al. (1998) conducted a literature review to determine the information on perinatal drug abuse available in 1998. Howell also wanted to gain insight to the level of progress made in combating the social injustice called perinatal substance abuse.

In 1998, Howell et al. reported:

> The prevalence of perinatal illicit drug use is known to be about 5% of all pregnant women nationwide, with higher rates for selected subgroups. Local studies have shown much higher rates. Substance abuse is associated with poverty, with the substance abuse of significant others, and with family violence. Perinatal substance abusers experience poorer birth outcomes (p.196).

Reports of both literature reviews agreed with the data found in the research studies. There were a significant number of perinatal substance abusers and perinatal substance abuse had a negative impact on the health of the mother, as well as, the child.

The greatest weakness found in all studies is unavoidable. It is not ethical to knowingly study women who are actively taking illicit drugs while pregnant. Therefore, all of the studies required collection of retrospective data. The studies also relied heavily on self-reported data. Many of the authors recognized this as an inherent weakness of the data. Neushotz and Fitzpatrick (2008) did not clearly list a sample size. They reported the total patient population and the numbers of patients that each primary care provider treated annually. The authors also listed the numbers of those patients who were male and female, as well as, the numbers of females who had used illicit drugs. The reader assumed this was the control group, but it was not listed as such. There were potential biases in both of the studies (Pinto et al., 2010; Vucinovic et al., 2008) that focused on the effects of substance abuse on pregnancy. Those biases included body mass index not recorded in either study, which could affect birth weight and hypertensive disorders. Data on HIV and Hepatitis was not collected in the Pinto et al. (2010) study, but was in the Vucinovic et al. (2008) study. This is an important omission since HIV and Hepatitis can both affect birth outcomes also.

Results

Results of six studies reported the incidence of perinatal substance abuse, effects on pregnancy and neonatal outcomes, as well as, the success of screening and treatment (Azadi & Dildy, 2008; Neushotz & Fitzpatrick, 2008; Pinto et al., 2010; Schempf and Strobino, 2009; Smith et al., 2009; Vucinovic et al., 2008). Unanimously, they reported that perinatal substance abuse resulted in negative pregnancy outcomes such as preterm delivery, low birth weight, placental abruption, neonatal hemorrhagic stroke, and an

increased incidence of infection in the neonate. Walkup et al. (2009) found fewer reports of perceived stress or substance abuse in the mothers who received early pregnancy perinatal drug abuse

Characteristics of individual studies included in this paper are presented in Table A-1 *Summary of Study Characteristics* (See Appendix B).

National Guidelines

American College of Obstetricians and Gynecologists (2014) states "screening for substance abuse is a part of complete obstetric care and should be done in partnership with the pregnant woman. They also state "all women should be routinely asked about their use of alcohol and drugs, including prescription opioids and other medications used for nonmedical reasons" (p.2). The American Academy of Pediatrics (2013) states "the primary care pediatrician's role in addressing prenatal substance use should include prevention, identification of exposure, recognition of medical issues for the exposed newborn infant, and regular follow-up to monitor any long-term effects" (p.a1009).The American Nurses Association (ANA), (2011) states "registered nurses working in the perinatal field to seek out appropriate rehabilitation and therapy treatment for women abusing substances (illicit or prescribed drugs, and/or alcohol) and to identify and offer appropriate therapy to infants exposed to these substances" (p.1). National certifying bodies, and national guidelines suggest that screening and intervention is necessary in appropriate treatment of perinatal drug abuse.

State Law

The states of Minnesota has specific statues that pertain to perinatal drug testing. Statue 626.556, Reporting of maltreatment of minors reads:

> 626.5561 REPORTING OF PRENATAL EXPOSURE TO CONTROLLED SUBSTANCES.§ Subdivision 1.Reports required.
>
> (a) Except as provided in paragraph (b), a person mandated to report under section 626.556, subdivision 3, shall immediately report to the local welfare agency if the person knows or has reason to believe that a woman is pregnant and has used a controlled substance for a nonmedical purpose during the pregnancy, including, but not limited to, tetrahydrocannabinol, or has consumed alcoholic beverages during the pregnancy in any way that is habitual or excessive.
>
> (b) A health care professional or a social service professional who is mandated to report under section 626.556, subdivision 3, is exempt from reporting under paragraph (a) a woman's use or consumption of tetrahydrocannabinol or alcoholic beverages during pregnancy if the professional is providing the woman with prenatal care or other healthcare services.

Theoretical Framework

Background

As the literature suggests, perinatal substance abuse can be seen in many settings in health-care. The policy designed from this DNP project will be universal to any health care provider, and will be able to be used in both the emergency department, and the

hospital at the project facility. The clinicians guided by this policy will need be educated in their specific settings. The project leader has used Laves Theory of Situational Learning in previous projects where collaboration and interaction were key components to learning. This project will require information presented to be specific to the project setting and will be best presented in the environment of the project site.

Lave's Theory of Situational Learning

Lave's Situational Learning Theory will be used as the theoretical framework to guide this project including the development of a perinatal drug abuse policy for the project site. Lave's Theory of Situational Learning states that learning is situated, that is, as it normally occurs. Learning is embedded within our culture and activity and it is usually unintentional rather than deliberate (Knowledgebase, 2011). Situational Learning Theory is a practice theory that requires that learning take place in settings or situations that are normal to that environment. Practice theories are used in the actual delivery of patient care to clients. They are also used to carry out nursing interventions, as well as educating patients and staff, and communicating with patients and staff. Social interaction and collaboration between all parties are essential components of Lave's theory. Situated learning requires that knowledge be presented in its authentic context, or in settings and situations that would normally involve that setting (Knowledgebase, 2011).

Evidence Based Practice Model: The Sanford Way

Conceptual Model

The Sanford Way is a work improvement model that allows users to see improvement in a different way. This model focuses on initiating change by identifying opportunities for improvement, including the subjects of the change in planning the interventions, and substantiating change by monitoring and evaluating outcomes (Rodak, 2012). Sanford Way Model of Change has three key components including people, process, and performance.

Each component of the model has identified principles. The people component incorporates building people and their capacity for work, learn through relentless reflection and continuous improvement, make technology fit people, and support people by creating efficient and reliable processes. The process component includes eliminating waste, error-proofing systems, designing work where the safest process is the easiest, liberating human creativity by establishing standard work, and creating connected process flows to improve performance. The performance component aligns with Sanford Rational Standards, sustains change for reliable outcomes, and utilizes evidence-based practice (Rodak, 2012). This model will be used to develop a perinatal drug abuse policy for the project site. (See Figure 1)

Figure 1. The Sanford Way model of quality improvement is an improvement methodology that allows us to identify improvement options that support the needs of all involved (Rodak, 2012).

Summary

Perinatal drug abuse directly causes poor, often devastating, birth outcomes (ASTHO, 2014). All health care providers will need the best tools possible to combat this critical health problem. There is a need at the project facility for a policy that guides providers to non-biased, screening, assessment, recognition, and intervention of perinatal drug abuse. The project site does not currently have a policy in place for perinatal drug

screening or intervention. Leadership organizations in the field of perinatal care suggest facilities adopt a policy when managing perinatal drug abuse, use, or suspected use. The development of a policy will support health care providers in using non-biased care to address this profound issue while promoting nursing theory guided practice, as well as nursing leadership in policy development, and clinical scholarship.

Section 3: Approach

Introduction

The purpose of this project was to develop a policy for the project site that will enable providers (Nurse Practitioners and Physicians) to objectively screen child-bearing aged women for drug abuse, by providing hospital and emergency department caregivers the policy support needed to test for, and intervene with, positive drug screens

This policy is needed to guide providers at the project to approach and intervene with this problem in a non-biased manor. This section will outline the process for curriculum development, implementation and evaluation of this quality improvement project. The following outlined the steps were taken to develop this project.

1. Identify key stakeholders
2. Assemble the team
3. Identify barriers and limitations to the development of this policy
4. Set Goals, objectives for perinatal drug abuse policy formation and guide the team to assess relevant evidence.
5. Seek Institutional Review Board approval at study site and Walden.
6. Develop the project site's perinatal drug policy based on the Sanford Way model, national standards and recommendations, and special interest recommendations.
7. Develop a plan for implementation of policy.
8. Develop an evaluation plan.

Project Team

Team members were chosen based on their knowledge, and by their investment in the project site, as well as their interest in quality improvement within the system. According to Kelly (2013), it is critical to identify and understand the systems structure and the structures influence on behavior. To have success in implementing lasting change efforts, it is important to press oneself to "go below the waterline", meaning that if we target interventions to change what we do, rather than what causes the system to work the way it does, change will be temporary and we will not have "gone below the waterline" (Kelly, 2013, p. 36-38). The goal of this project will be to go below the waterline, thus implementing long standing change in the management of perinatal substance abuse. Team members for this quality improvement project will include:

1. Team leader: The DNP student author of this project who will function as facilitator.
    a. Team leader will specifically develop policies and procedures and accompanying documents for perinatal drug abuse intervention. The team leader will develop the policy and procedure based on State and National guidelines as well as recommendation of local special interest groups.
2. Administration representative/ CEO of Project Site
    a. Evaluation and implementation will be monitored/managed by the CEO or administrative representatives such as the CNO or QI officers.
3. Chief Nursing Operator (CNO) at Project Site
    a. Evaluation and implementation will be monitored/managed by CNO or representative, administrative representatives, and the QI officer.
4. Provider representative.

a. Implementation and continued participation will be the responsibility of participating providers.

5. Quality Improvement (QI) Officer of Nursing.

    a. Evaluation and implementation will be monitored/managed by QI officer, the CNO representative, and the CEO Representative.

Development of the project site's Perinatal Drug Policy

Ethical Considerations

The researcher submitted all paperwork required to obtain approval from Walden Universities Internal Review Board (IRB), as well as the project site facilities management officers. Special consideration will be made to avoid any race-specific interventions in this policy.

Developing the Policy

Evidence leads to the recognition that there must be a policy in place for health care providers to address perinatal drug abuse. The lack of such a policy leaves providers vulnerable to the assumption of provider bias when perinatal drug abuse is recognized and interventions are ordered or implemented. Development of this policy was specific to the project site, and the needs of the community they serve. The policy is based on National and State guidelines, recommendations from both the American Academy of Pediatrics and American Academy of Obstetrics, American Nurses Association, as well as local special interest groups. Stakeholders and team members were interviewed for input and opinion during the development phase of the policy. The policy will be reviewed for content and validity by the CEO as well as the medical committee. The policy will go through an approval process as all policies do at the project facility.

Planning Implementation of the Policy

Project site stakeholders and leadership personnel were included in planning the implementation of the policy. Evidence for the need of a policy for perinatal drug abuse was presented to stakeholders and leadership. The policy was developed by the project leader and is specific to the project site. The project leader used current state and local laws, as well as evidenced based on guidelines set forth by ACOG, the American Academy of Pediatrics, and the ASTHO. Using the Sanford Way model for implementation, the project leader identified opportunities for improvement, included the subjects of the change in planning the interventions, and plans to sustain change by monitoring and evaluating outcomes (Rodak, 2012).

Develop Evaluation Plan

Evaluation of this perinatal drug abuse policy began in the planning phase of this project. This evaluation plan was discussed with the stakeholders in the early development stages. Following are the suggested steps to be taken during this evaluation, the steps are varying and may be conducted simultaneously or cyclic (Hodges, 2011. p. 210-211).

1. Engage stakeholders
2. Describe the program.
3. Conceptualize the evaluation.
4. Design the evaluation
5. Chose and test the instruments and procedures.
6. Collect evaluation data.

7. Analyze and report data.

8. Make changes to the program based on the data.

9. Evaluate again.

Evaluation will focus on the number of child-bearing aged women that are screened for pregnancy and perinatal drug abuse beginning at least six months prior to implementation of the policy, as well as six months after the implementation of the policy.

Evaluation of the program is vital when planning and processing any project. Evaluation must help show program success, improvement, and whether the program is meeting its goals and objectives (Hodges, 2011). Evaluation of this policy will take place at a later time, and will not be part of this project.

Summary

Perinatal drug abuse is a profound problem faced in healthcare today. Providers at the project site do not have a policy in place to guide assessment, diagnosis and intervention of perinatal drug abuse. With the lack of policy, providers are vulnerable to the assumption of provider bias when intervening with perinatal drug abuse. Through nursing leadership, collaboration, and nursing policy development providers will be given the tools needed to assess, diagnose and intervene with perinatal drug abuse.

Section 4: Findings, Discussions and Implications

To recap, the was to develop a policy for the project site that will enable providers (Nurse Practitioners and Physicians) to objectively screen child-bearing aged women for drug abuse, by providing hospital and emergency department caregivers the policy support needed to test for, and intervene with, positive drug screens

This project is relevant to nursing practice by alleviating the assumption of health care provider bias, as well as placing nurse leaders into position of policy development through promotion of nursing leadership. Development of system policy, by nurses, will positively impact the future of nursing mentorship within the nursing profession.

The goal of this project was to impact social change by identifying and intervening with perinatal substance abuse, in system supported manor. This intervention will lead to better total wellbeing of communities, families and individuals suffering from perinatal drug abuse.

The objectives of this project were to develop a policy for a critical access hospital, in a high risk area, who is currently operating without a policy, and who is currently leaving perinatal drug abuse intervention to individual decision, thus implying bias. This section will discuss the project and its implications, strengths and limitations, and the analysis of the DNP students self.

Discussion of Project Product

This facility policy was developed to intervene with perinatal drug abuse in a non-biased manor, thus having a positive impact on perinatal drug abuse and improving

outcomes for communities, providers, and patients. The policy was developed taking recommendations from national guidelines set forth by accredited bodies as well as from stakeholders at the facility, and special interest stakeholders from the community.

Discussion of Findings

Program Development

After receiving IRB approval from Walden University, the project leader in motion a series of meetings with project site stakeholders. Meetings included face-to-face visits, telephone conference, emails conversations, and group meetings. Meetings were attended by DNP student (project leader) and site stakeholders (including the CEO, CNO, QI Nurse, and special interest representatives from the community). During these meetings, a perinatal drug abuse policy was discussed; input from these stakeholders, available literature and national guidelines, guided the development of this policy.

The policy was written in the format used by this facility for policy development. National guidelines recommend that every health care facility have a policy that protects providers from the assumption of bias when screening for perinatal drug abuse. The data collected suggested there are specific adverse outcomes that can be seen with perinatal drug abuse such as vascular accidents, placental abruption, preterm labor, perinatal infant mortality, and hypertension in pregnancy to name a few. These specific adverse outcomes were included in the policy. There is significant evidence that child-bearing aged women are at risk for perinatal drug abuse. Kuczkowski (2007) reported ‘in the United States nearly 90% of drug-abusing women are of reproductive age. Polysubstance abuse is very common” (p. 578).

The community in which this project site lies is affected by perinatal drug abuse at a higher rate than state average, it is estimated that this community has a 60% greater chance of perinatal drug abuse than other Minnesota communities (Enger, 2014). This project site is the only hospital or emergency department located for more than 60 miles of this service community. This facility does not perform prenatal care or labor and delivery care; they transfer patients to regional delivering centers. In 2010, nearly 3 percent of mothers delivering at the two closest regional delivering facilities tested positive for drugs the day of their child's birth. In 2013, that number more than doubled to more than 6.5 percent (Enger, 2014). This community was recognized to have greater than average need for perinatal drug abuse intervention and a grant was given to one of the regional delivery centers for a 1.6 million dollar perinatal drug intervention program (Enger, 2014). Stakeholders in this community have recognized the need for immediate intervention in perinatal drug abuse at the project site as well.

Currently, providers at the project site are left to determine the need to screen for pregnancy or perinatal drug abuse at their own personal discretion. There is no policy in place to guide that determination. This leaves providers vulnerable to the assumption of bias when determining the need for pregnancy or drug screens. The development of this policy will alleviate the assumption of bias and provide the community with appropriate, evidence-based, and consistent interventions for the profound problem of perinatal drug abuse.

The developed policy will require that any female of child bearing age (14-55), presenting to the ED for; (a) drug overdose (intentional or un-intentional), (b) those needing treatment with a schedule I-IV medication have a pregnancy screen. Perinatal patients that presents to the ED with the following conditions must have a drug screen (which could include a quantitative screen if the provider feels this is appropriate): (a) those in labor or have delivered prior to admittance, (b) placental abruption, (c) evidence of unexplained or poor weight gain in pregnancy, (d) MI or CVA in a child bearing aged woman, or HTN in pregnancy, (e) admitting to, or evidence of, poor or no prenatal care, (f) admitting to illicit drug abuse, (g) fetal demise, (h) at the request of county or tribal social services, (i) if health care provider exam, or history intake dictates.

Implementation Plan

The policy was developed specifically for the project site. The project team recognized the need for a policy and accepted the presentation of the project and agrees with the need for a policy. Senior leadership at the project site identified the need for a policy as a priority, and agreed that the groundwork has been laid for policy implementation.

Although the developed policy was submitted to the project site, senior leadership has voiced their understanding that project evaluation is needed and they will decide when or if the project site will ultimately implement the policy. An evidence based evaluation plan was proposed to the team of stakeholders, along with the project. The evaluation plan reflects that which was laid out in the project proposal. During project planning meetings, it was often voiced that there is much work to do in the future of

perinatal drug abuse at the project site. Access to follow up, post hospital care, and treatment were recognized as the greatest future concerns for the project site. The policy can be referenced in Appendix A.

Evaluation Plan

Evaluation of the project was also presented to the project team. Planning for evaluation began at the onset of the project. The evaluation plan presented suggests that drug screens, as well as pregnancy screens, are tracked for six months prior to and after implementation of the policy. If at any time during the evaluation leadership identifies concerns for the policy, changes could be made to the policy that will promote perinatal drug use interventions. It is suggested that tracking of drug and pregnancy screens be completed by nursing staff via the electronic medical record.

Specifically, it is suggested that for a period of 6 months before and after implementation of the project, a log of every female of child bearing age, that presents to the ED for (a) drug overdose (intentional or un-intentional), (b) those needing treatment with a schedule I-IV medications and have a pregnancy screen. It is also suggested that the log record all perinatal patients that present to the ED with the following conditions which require a drug screen (a) those in labor or have delivered prior to admittance, (b) placental abruption, (c) evidence of unexplained or poor weight gain in pregnancy, (d) MI or CVA in a child bearing aged woman, or HTN in pregnancy, (e) admit to or evidence of poor or no prenatal care, (f) admitting to illicit drug abuse, or (g) at the request of county or tribal social services.

It is suggested this log be kept for six months prior and six months after implementation of the policy.

Implications

Practice

This DNP project has used evidence to identify the need for policy development. This project allowed this student to lead a team of stakeholders and to develop a policy that will lead to practice change at the project facility. Policy development by DNP prepared nurses is needed to elevate the professional status of nursing. Bartels (2005) stated "the AACN has adopted a new position that recognizes the DNP degree as the highest level of preparation for clinical practice" (p 233). DNP nurse leaders are encouraged to become active in leadership, and policy development. As a DNP student, and through the DNP curriculum, this student learned to recognize practice problems, and can utilize the skills needed to translate evidence into practice problem solutions.

This project allowed the student to develop a policy that will positively impact the current perinatal drug abuse problem facing practitioners at the project site; it will also eliminate the suspect of provider bias. This is a health problem that the student feels passionate about intervening with. As this student has lived and worked in this community her entire life, she has personally seen the devastating effects of perinatal drug abuse. The student has also experienced the unfortunate consequences of drug screening without a policy, and being accused of biased behavior when doing so.

Screening and testing for perinatal drug abuse can be difficult. Prasad (2014) stated, "Despite the adverse outcomes associated with exposure to tobacco, alcohol, and

illicit drugs, only approximately 20% of ob/gyns effectively screen patients for illicit drug use" (n.p.). Prasad (2014) identified provider embarrassment, fear of upsetting patients, and uncertainty of where to turn with positive results as barriers to screening.

Policy Development

Creating a perinatal drug screening policy is supported by the literature as evidenced by recommendations from professional organizations that lead health care policy. After a thorough review of the evidence, and referring to national guidelines, as well as meeting with both project site and community stakeholders, a policy for perinatal drug abuse screening was developed for the project site. This project will positively impact provider practice by intervening with the escalating health problem of perinatal drug abuse while eliminating provider bias.

Future Research

Research supports a policy for perinatal drug screening. Future research anticipated to stem from this project will include perinatal drug abuse treatment, and long term substance abuse care. Project site stakeholders have identified the need for future research into long term intervention, and management of perinatal drug abuse, as a priority problem for this project site.

Social Change

The nursing profession claims is founded on evidence-based practice. From the times of Florence Nightingale nurses have used evidence-based practice to guide clinical decision making (White, 2012). The rural health setting is a perfect setting for nurses (who are not known to be policy makers), to use evidence-based practice and take a

leadership role in policy development. Rural health nurse practitioners are required to practice at the top of their scope using autonomous, evidence-based practice. It is important for rural health NPs to use their experience and knowledge to guide policy development, and change the culture of policy making to be nursing driven. This evidence based practice policy allows nursing to take a leadership role in policy development.

Strengths and Limitations

There are many strengths to this DNP practice project. An evidenced based practice policy will allow providers to screen for, and intervene with, perinatal drug abuse in a non-biased manor. It will give providers comfort knowing they are intervening with this significant, complex health care problem, but also are protected from the pressures of bias. Currently, providers at the project site have no policy in place and are simply intervening based on their own personal knowledge and preference. This project is strengthened yet by the fact that it was developed based on up-to-date research, national and special interest recommendations, and state law.

Limitations of the project include that is developed for a particular site, and is less generalizable for other rural health facilities. The project will delivered to site leadership and will be implemented at their discretion, if at all.

Analysis of Self

In pursuit of my doctoral degree, I have felt significant personal and professional growth. I have worked as a rural health NP for the past five years. I have worked without a policy for perinatal drug abuse that entire time. Unfortunately, I have been involved in

situations where I myself have been accused of personal bias when intervening with perinatal drug abuse without a policy. This DNP project has given me the opportunity to impact this truly devastating community health problem, while pushing myself into a nurse leadership role. I recognize that nurses are not predominantly policy makers. I felt a personal need to focus my project on policy development, and was very happy that my project can impact perinatal drug abuse, and support nurses and physicians alike by eliminating the suspicions of bias.

Summary

Perinatal drug abuse is rapidly becoming one of the most profound issues facing the health and wellbeing of neonates. Provider recognition of, and intervention for, perinatal drug abuse is often left to provider discretion and bias. Without a policy in place to guide health care providers, the assumption of bias can be detrimental to intervention. This policy project will support health care providers at the project site, and encourage them to intervene with perinatal drug abuse and every possible encounter.

Section 5:

Project Summary

Introduction

Perinatal drug abuse is rapidly becoming one of the most profound issues facing the health and wellbeing of neonates. Provider recognition of, and intervention for, perinatal drug abuse is often left to provider discretion and bias. Policy to recognize, assess, and intervene in perinatal drug abuse is necessary for all providers, and will alleviate any potential provider bias, as well as provide guidance and direction for intervention.

Project Goal

The primary project goal is to develop a policy for the project site that will enable providers (Nurse Practitioners and Physicians) to objectively screen child bearing aged women for drug abuse, by providing hospital and emergency department caregivers the policy support needed to test for, and intervene with, positive drug screens. Specific objectives for this project will be to develop a perinatal drug abuse policy based on National Guidelines established by the American Academy of Pediatrics, American Academy of Obstetrics, RNAO, evidence (Cochrane reviews), state law, and local tribal government recommendations.

Approach

This quality improvement project engaged a team of stakeholders which included both facility and community representatives, using evidence based practice, developed a site specific perinatal drug abuse policy.

Results

An evidence based practice policy was developed that will support providers screening, testing, and intervening with perinatal drug abuse, protecting provider from assumption of bias.

Implication for practice

Nurses are not typically strong in policy development and are historically known to "shy away from leadership opportunities" (Mason, 2013, p. xxvii). Doctorate-prepared nurses are called upon to lead their field in policy development and social change. Development of system policy, by nurses, will positively impact the future of nursing mentorship within the nursing profession. Nursing is working diligently to develop a culture of nursing mentorship within this profession that goes above and beyond the individual and organizational level (Montavlo, 2015).

Background, Purpose and Nature of the Project

Background

Perinatal drug abuse is a growing problem for all communities in the United States. The project facility is a critical access emergency department, hospital and rural health clinic located in northern Minnesota. The county in which the facility lies is within the borders of an Indian Reservation, The project facility does not currently have a policy on perinatal drug testing or perinatal drug use intervention. The current status quo is to leave all perinatal drug screening to the determination of the provider, leaving the provider vulnerable to accusation of bias.

Purpose

According to Association of State and Territorial Health Officials (ASTHO) (2014), "taking a public health approach to routine screening for unhealthy substance use in women at every healthcare visit can help increase the opportunities for primary prevention" (p. 2). The purpose of this project was to develop a policy for the project site that will enable providers (Nurse Practitioners and Physicians) to objectively screen child-bearing aged women for drug abuse, by providing hospital and emergency department caregivers the policy support needed to test for, and intervene with, positive drug screens.

Nature of the Project

Evidence leads to the recognition that there must be a policy in place for health care providers to address perinatal drug abuse. The lack of such a policy leaves providers vulnerable to the assumption of provider bias when perinatal drug abuse is recognized and interventions are ordered or implemented. Development of this policy was specific to the project site, and the needs of the community they serve. The policy is based on National and State guidelines, recommendations from both the American Academy of Pediatrics and American Academy of Obstetrics, American Nurses Association, as well as local special interest groups, and state and local law. Stakeholders and team members were interviewed for input and opinion during the development phase of the policy.

Project Design and Setting

This DNP Project was designed to be implemented by providers at the project site. The project began by meeting with project site management and determining the

greater need at the project. Perinatal drug abuse intervention was identified as a great need at the project site. Extensive review of the evidence revealed that intervention must be supported by policy to prevent suspicion of provider bias. After receiving approval by the project site and Walden University's Institutional Review board, a team of project site leadership, community stakeholders and the project leader were called upon for advice throughout policy development.

Interpretation of Results

A policy for perinatal drug abuse screening and intervention is imperative to protect providers from assumption of bias. Lindsay (2013) recommended "parturients identified as drug users" receive a comprehensive management approach involving both "high risk obstetrics, and comprehensive counseling" (p. 140). Recognition of this profound social problem has healthcare leaders pushing for universal screening of all child bearing aged women, and certainly for all pregnant women. ASTHO (2014) stated:

> States can support the American Congress of Obstetricians and Gynecologists' (ACOG) recommendation for universal substance use screening in early pregnancy in a variety of ways. State agencies, quality improvement efforts, and perinatal collaborative can advance prenatal screenings as the expected standard of care for obstetric providers. State health agencies can ensure that Medicaid reimburses for substance abuse screening, support provider education and training, and streamline entry points for substance abuse treatment (p.6).

The literature regarding perinatal substance abuse has proved consistent results. There is a national, as well as, global need for interventions surrounding perinatal

substance abuse. In addition, there is a need for further screening and policies for drug screening and testing, which are specific to women, and pregnant women.

American College of Obstetricians and Gynecologists (2014) states "screening for substance abuse is a part of complete obstetric care and should be done in partnership with the pregnant woman. They also state "all women should be routinely asked about their use of alcohol and drugs, including prescription opioids and other medications used for nonmedical reasons" (p. 2). The American Academy of Pediatrics (2013) stated "the primary care pediatrician's role in addressing prenatal substance use should include prevention, identification of exposure, recognition of medical issues for the exposed newborn infant, and regular follow-up to monitor any long-term effects" (p.a1009).The American Nurses Association (ANA), (2011) stated "registered nurses working in the perinatal field to seek out appropriate rehabilitation and therapy treatment for women abusing substances (illicit or prescribed drugs, and/or alcohol) and to identify and offer appropriate therapy to infants exposed to these substances" (p. 1). National certifying bodies, and national guidelines suggest that screening and intervention is necessary in appropriate treatment of perinatal drug abuse.

Implication for Practice

This DNP project has used evidence to identify the need for policy development. This project allowed me to lead a team of stakeholders, and to develop a policy that will lead to practice change at the project facility. Policy development by DNP prepared nurses is needed to elevate the professional status of nursing. Bartels (2005) stated "the AACN has adopted a new position that recognizes the DNP degree as the highest level of

preparation for clinical practice" (p. 233). DNP nurse leaders are encouraged to become active in leadership, and policy development. As a DNP student, and through the DNP curriculum, I have learned to recognize practice problems, and can utilize the skills needed to translate evidence into practice problem solutions.

Conclusion

This DNP project resulted in the development of an evidence based practice policy that will support providers at the project site, minimizing assumption of bias and will meet the needs of the community by positively intervening with perinatal drug abuse.

Perinatal drug abuse is a significant community health problem that will require intervention at every opportunity. Without this evidence based project, the facility and its surrounding communities are at risk of missing the opportunity to intervene with perinatal drug abuse, and providers are at risk for the assumption of bias. Upon final approval, and meeting all requirements of this DNP degree, the policy will be submitted to the facility site (along with a 12 month evaluation plan) with the hopes that the project site will follow the evidence, support their providers and community, and implement this perinatal drug abuse policy. The facility policy can be referenced in Appendix A

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Appendix A

Title: Perinatal Drug Abuse Intervention: Policy for Drug Screening

Created: 10/2015

PURPOSE: To provide policy and procedure for perinatal drug abuse screening.

Definitions:

Childbearing aged women: for this policy that will include women ages 14-55.

Poor or no prenatal care: defined as less than two prenatal visit in their first trimester, less than one per month in their second trimester, and less than two visits per month in their third trimester.

Policy:

Urine drug screen will be ordered by the facility provider based on criteria stated in this policy, as well if the medical or psychosocial assessment made by the provider indicates the necessity.

If substance abuse is discovered, proper medical, social and mental health support will be provided, and reporting will comply with Minnesota State Statues 626.556 and 626.5561, "Reporting of Maltreatment of Minors" and "Reporting of Perinatal Exposure to Controlled Substances".

Procedure:

1) Admitting nurse, and provider will screen any childbearing aged women for perinatal drug abuse.

2) On the occasion that any of the following factors are identified, a urine pregnancy test, as well as urine toxicology screen, will be collected.

    Drug overdose (intentional or un-intentional), (b) those needing treatment with a schedule I-IV medication, (c) any identified, or clinical suspicion of, illicit drug use in a child bearing aged woman.

3) Perinatal (or known pregnant) patients that presents to the ED with the following condition(s) must have a drug screen (which could include a quantitative screen if provider feel this is appropriate).

    (a) Those in labor or have delivered prior to admittance, (b) placental abruption, (c) evidence of unexplained or poor weight gain in pregnancy, (d) MI, CVA or unexplained tachycardia in a child bearing aged woman, or HTN in known pregnancy, (e) admittance to, or evidence of, poor or no prenatal care, (f) admitting to illicit drug abuse, or (g) fetal demise, or (h) at the request of county or tribal social services.

4) Although informing the patient is preferred, the drug screen does not require patient or parent permission.

5) The facility social worker will be notified of confirmed perinatal drug abuse, and will notify the appropriate Human Services, Child Protection, or Indian Child Welfare office. This report will be submitted, in writing, within 72 hours of the visit.

Appendix B

Table 1: *Summary of Study Characteristics*

Authors and Year	**Subjects, Sample**	**Study Purpose**	**Study Type**	**Instrument; Analysis**	**Findings**
Zadi, A., Didly, G., (2008) Universal screening for substance abuse at the time of parturition	Four hundred sixty two women that delivered during the first four months of 2005 at a New Orleans Obstetrics department.	To determine the prevalence of substance abuse in an inner city population at delivery admission by universal toxicology screening	A Retrospective Cohort	Universal toxicology screening results, compared to demographic, labor and outcome data. The seven substances tested for were amphetamines, cocaine, barbiturates, opiates, benzodiazepine, and phencyclidines.	Nineteen percent of the tested population tested positive for one of 7 substances at admission for delivery.
Bently et al., (2007) Implementing a clinical and research registry in obstetrics: overcoming barriers	All patients 15 years and older that were cognitively able to complete the survey that were admitted to the obstetric	To define the obstacles and solutions in developing and implementing a prospective obstetrics database registry that	Observational-Longitudinal, Prospective Cohort study	Questionnaire given to all obstetric patients in one clinic over a specific period of time	A mental health registry that merges clinical data and research needs can be successfully integrated into the obstetrical setting.

	clinic at Harborview medical clinic during an unspecified time frame.	collects biopsychosocial data on women during pregnancy and postpartum			
Schmpf, A., Strobino, D., (2008) Drug use and limited prenatal care: an examination of responsible barriers	812 low-income women who delivered at Johns Hopkins Hospital	To determine sociodemographic, psychosocial and health belief factors that explain the association between maternal drug use and little or no prenatal care.	Retrospective Cohort study.	Analysis of toxicology screens, medical records, and self-reported drug use. Survey given to those mothers determined to have used drugs.	Adjustments for sociodemographic characteristics and cocaine and opiate use were predictive of little or no prenatal care. The effects of cocaine were explained by psychosocial factors; external locus of control, fear of being reported. Where opiate use remained strongly related to little or no care in fully adjusted models. Therefore, different outreach and education strategies may be necessary with cocaine VS opiates.

Smith et al., (2009) Success of mental health referral among pregnant and postpartum women with psychiatric distress	initially 465 pregnant and postpartum women receiving care from publicly funded obstetric clinics between April 1 and June 25th 2005.	To measure the rates of and determined factors associated with mental health services use among 465 pregnant and postpartum women.	Prospective Cohort study	Diagnostic evaluation screening tool.	Rates of mothers accessing and particularly continuing in mental health treatment were low.
Walkup et al., (2009) Randomized controlled trial of a paraprofessional delivered in home intervention for young reservation based American Indian mothers	Teenage, first time, unmarried, mothers living in reservation communities, with interventions beginning during pregnancy and continuing until 12 months post partum.	To evaluate the efficacy if a paraprofessional delivered home visiting Family Spirit intervention among young, reservation based American Indian mothers on parenting knowledge, involvement and maternal infant outcomes with emphasis on parenting knowledge, social support, stress, depression and substance abuse.	Treatment, Randomized Double Blind study	25 "Family Spirit" home visits were performed with the treatment group and 23 breast feeding/nutrition education interventions were performed with the active control group. Evaluation done at baseline, 2 moths post partum, 6 months post partum and 12 months post partum. A computerized collection of data to ensure randomization.	The study supports the efficacy of the paraprofessional delivered Family Spirit home intervention for young American Indian mothers on maternal knowledge and infant behavior outcomes.

Curriculum Vitae

Joeanna Larson RN, FNP, MSN
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OBJECTIVE: Provided as an attachment to Capstone Project intended to meet the requirements of graduation from Walden University, DNP Program.

QUALIFICATIONS: I am a certified Family Nurse practitioner with Sanford Health Systems. I am a motivated, skilled, compassionate and determined. I have lived in this community my entire life, and am vested in the health and wellness of this community.

EDUCATION

1999-2001 Diploma in Nursing, LPN, Itasca Community College

2001-2002 Associate Degree, RN, Northland Community and Technical College

2006-2008 Bachelor of Science Degree, BSN, Bemidji State University

2008-2011 Master Degree, MSN, University of North Dakota

2013-Current Enrolled at Walden University, DNP program expected graduation date February, 2015

EMPLOYMENT

2001-2002 LPN, Clearwater County Memorial Hospital- Bagley Minnesota Clearwater County hospital is a rural county hospital that has approximately fifteen beds. As an LPN at Clearwater Hospital my responsibilities included assessments, med pass, ADLs, assisting in the Emergency Room, lab, and x-ray. Working in a rural hospital helped to build the foundation of my nursing experience in such a way as to promote critical thinking as the driving force of my care.

2002-2011 RN, North Country Regional Hospital – Bemidji Minnesota. I was employed in Outpatient Surgery and Recovery Room. Responsibilities included the assessments and admissions of surgical patients both inpatient and out. I work half of my hours in admissions and half in recovery. Our Recovery Room is a critical care area where as an RN I am responsible for the care of all surgical cases. Assessment and patient advocacy are my most utilized skill.

I was employed on the Family Care Center at North Country. Family Care Center consists of three separate areas; 1-Med/Surg. 2. Pediatrics and 3. Labor and Delivery, Newborn Nursery and Post Partum. On family care I spent the first year working as a staff RN on the Med-Surg. /Pediatrics floor. Following one year of experience I began working primarily in Labor and Delivery. During the last three years of my employment on Family Care worked as the fulltime Night Charge Nurse for the Family Care Center which consisted of being the charge nurse for all three areas of the department. In 2007 I transferred departments and began working in the OPS/PACU department. PACU is a critical care department in which I served as a fulltime BSN.

In 2008 I served as adjunct faculty at Northland Community and Technical College. Summer session 2008 I taught Maternal Child Health and Adult Nursing II on the Mahnomen Minnesota Campus. Fall 2008 I served as a structured tutor to the Graduating RN students on the Thief River Falls Minnesota campus.

In 2010 I served as a GTA (Graduate Teaching Assistant) at the University of North Dakota. I served as a Clinical Instructor for the Postpartum and Newborn clinical rotation. As well as lead discussion group twice weekly. I was also responsible for the correction and grading of the student care plans and portfolios.

2011-2015 I worked as an FNP for Sanford Health Systems, at the project site. I am a skilled FNP working full time as family practice provider in the clinic and ED setting. The project site is the primary hospital and ED caring for the residents of a large Indian Reservation.

In August 2014 I taught at Bemidji States University as faculty for advanced skills II and clinical II.

9/2015- Present: I transferred within Sanford system to Thief River Falls clinic where I am working two days per week in Internal Medicine clinic and two days per week in Urgent Care. I also cover the Emergency Department one weekend per month.

8/2015- Present I began teaching with Northland Community and Technical College in the Associate RN program. I am teaching Clinical I and Clinical II currently.

OTHER QUALIFICATIONS

I currently hold ACLS, PALS and CALS certifications. I am certified to implant Nexplanon and Merena birth control.

2013- present I have been working in collaborative effort with White Earth Chemical Dependency, White Earth Mental health, Mahnomen Social services, Indian Child Welfare and the Department of Health to create a community based, collaborate approach to substance abuse on the White Earth Reservation. This group has actively taken a role in the recent opening of Odapinaan Giwiidookage Onijinaan, a residential, all male, inpatient addiction/treatment facility among many other substance abuse programs and interventions within our community. The goal of this collaborative effort is to open a detox center, and inpatient female residential program as well.

I served as the President of the Board of Directors for Bagley Youth Hockey association and have been on the board since 5/2004. In 2007 and 2008 I served as the student representative to Bemidji State University, Department of Nursing's Advisory Board. I assisted Clearwater County Nursing Services in surveillance and implementation of their county health survey, fall 2007.