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### Reproductive Health Needs Among Women in Treatment for Substance Use Disorder

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Reproductive Health Needs Among Women in Treatment for Substance Use Disorder

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### **Abstract**

Integrated care models for substance use disorder (SUD) and reproductive health care have been proposed as a strategy to increase access to reproductive health care for women in treatment for SUD. This cross-sectional, survey-based study measured how women of childbearing age in residential treatment report their demand for and access to reproductive health care, their pregnancy intention, contraceptive utilization and preference for integrating reproductive health care with their current SUD treatment milieu. Eighty-five percent of the women interviewed (N=108) expressed a desire to prevent pregnancy in the next year, although only one-third (33.6%) were using a form of contraception at the time of the study. The majority of women (69%) reported their preference for the integration of contraceptive care and treatment for SUD. If cost was not an issue, 28.7% of women would prefer a long acting reversible contraceptive (LARC) and 40.7% would prefer either injectables, oral contraceptive pills or patches. Improving access to reproductive health for women in treatment for SUD by integrating these services may increase uptake of all methods of contraception and would be well received by most women. Eliciting the preferences of women related to family planning and pregnancy prevention and then responding to those preferences with affordable or no cost access to contraception is a public health imperative. These practice changes stand to improve the myriad health outcomes for women and children associated with unintended pregnancy in the context of SUD.

### **Introduction and Background**

Substance use disorder (SUD) is defined in the *Diagnostic and Statistical Manual of Mental Disorders*, 4<sup>th</sup> edition, as a “maladaptive pattern of substance use leading to clinically significant impairment or distress” (American Psychiatric Association, 2013). According to the Substance Abuse and Mental Health Services Administration (2020), 7.2 million women aged 18 and older had SUD in 2018. Since 2005, substance use disorders are being listed among the top ten major public health concerns in the United States population (Albright & Rayburn, 2009; Thacker et al., 2005).

In 2011, nearly half of the 6.1 million pregnancies in the United States were unplanned. However, this is the lowest rate since at least 1981 (Guttmacher Institute, 2019). This drop in the rate of unintended pregnancy in the general population is likely due to an overall increase in the use of highly effective contraceptive methods (Guttmacher Institute, 2019). Women with active SUD have significantly greater odds of an unintended pregnancy compared to women who do not have an active SUD (Terplan, Hand, Hutchinson, Salisbury-Afshar, & Heil, 2015; Than et al., 2005) due to the inconsistent use of reliable contraceptives (Drescher-Burke, 2014; Sharma, Aggarwal, & Dubey, 2002; Terplan et al., 2015). An estimated 90% of women with active SUD report a history of at least one unintended pregnancy (Heil et al., 2011). Rates of unintended pregnancy for all women correlate to inconsistent use of effective contraception, but women with SUD are particularly vulnerable because they often lack access to reproductive healthcare both when they are active in their addiction, when they enter treatment and when they are discharged from treatment (Bornstein, Gipson, Bleck, Sridhar, & Berger, 2018; Drescher-Burke, 2014; Robinowitz, Muqueeth, Scheibler, Salisbury-Afshar, & Terplan, 2016; Terplan et al., 2015).

Women with SUD who become pregnant face many social and emotional hardships during pregnancy such as fear of criminalization, feelings of guilt and shame, and stigmatization from both health care professionals and society at large (Metz, Köchl, & Fischer, 2012). These hardships can lead to initial or exacerbation of psychiatric conditions such as post-traumatic stress disorder, depression or anxiety, which often underlie women's substance abuse. In 2018, 4.4 million women over the age of 18 had co-occurring SUD and mental illness (Substance Abuse and Mental Health Services Administration, 2020). Furthermore, unintended pregnancy is a risk for relapse among women in recovery for active SUD (ASAM, 2017; Metz et al., 2012). Stressors during pregnancy can cause relapse in women with SUD or an increased use of substances for women with untreated SUD (Metz et al., 2012). When a woman in recovery for active SUD relapses, the risk for morbidity and mortality increases significantly (Metz et al., 2012).

Despite the increasing number of SUD treatment facilities, only 11% (2.64 million) of the 24 million men and women with SUD receive treatment (Saia et al., 2016). Of the 2.64 million men and women that receive treatment for SUD, only 23% are women (Center for Behavioral Health Statistics and Quality, 2014). The peak age of women receiving treatment for SUD and peak fertility age overlap (Center for Behavioral Health Statistics and Quality, 2014). In addition to known barriers to treatment such as insurance coverage, treatment readiness, and inability to afford treatment, women report unique barriers to SUD treatment that are related to motherhood including limited child-care availability, increased social stigma and fear of criminal or child welfare consequences (Chen, Strain, Crum, & Mojtabai, 2013; Saia et al., 2016). Furthermore, many treatment facilities do not accept pregnant women with active SUD, which increases risk for overdose in the women and poses a risk for the fetus as well.

Women enrolled in SUD treatment programs identified numerous barriers to reproductive health services, including not being asked about family planning, unable to fill prescriptions for birth control, difficulty making and getting to appointments, and not knowing they could discuss reproductive health services while in a treatment facility for substance use (Robinowitz et al., 2016). For many women, SUD treatment facilities are the only source of medical care at the time of enrollment (Substance Abuse and Mental Health Services Administration, 2017). A systematic review by Terplan et al. (2015) concluded that offering contraception services in conjunction with SUD treatment could help reduce unintended pregnancy in this population. However, a review of literature returned only one study to date reflecting the preferences of women in treatment for SUD for the integration of contraception services with their current treatment milieu. In 2016, Terplan, Lawental, Connah, and Martin measured women's preference for accessing family planning services at treatment sites including residential, intensive outpatient, outpatient and medication assisted treatment (MAT). This study, which conducted focus groups and in-depth interviews with 115 women and 95 men about their family planning needs, knowledge of reproductive health and preferences for integration, found that 83% of women and 58% of men would be more likely to use reproductive health services if they were offered through their SUD treatment program.

### **Problem Statement**

The benefit of women-specific SUD treatment programs include a safe environment to address reproductive health needs such as contraception and family planning. Several studies address low contraception adherence among women with SUD, however do not explore the preferences of women related to seeking care and reproductive intention in the context of recovery (Griffith, Kumaraswami, Chrysanthopoulou, Mattocks, & Clark, 2017; Robinowitz et

al., 2016). Existing evidence suggests that co-locating SUD treatment and reproductive health services can benefit women by eliminating known barriers to access and increasing reproductive autonomy, thereby preventing unplanned pregnancies (Robinowitz et al., 2016; Terplan et al., 2016).

### **Purpose**

The purpose of this study is to evaluate access to reproductive healthcare including contraception for women enrolled in treatment for SUD as well as their preferences for integration of family planning into treatment for SUD. Actively seeking the preferences of this currently underserved population will help identify and leverage opportunities for health promotion. Actively seeking and responding to this population's preferences represents a move to support women's reproductive autonomy while improving their access to evidence-based contraceptive counselling and the full range of contraceptive methods.

### **Review of Evidence**

The prevalence of substance use disorder (SUD) in the United States is high. One in 10 people have SUD (Substance Abuse and Mental Health Services Administration, 2017); approximately one-third of whom are women (Griffith et al., 2017). The National Institute of Drug Abuse (2018) has identified the importance of gender in the course and treatment of SUD and the particular risk for morbidity and mortality experienced by women with untreated SUD. The peak age of women with SUD and peak fertility age overlap, making reliable contraception essential for this population. The rate of unintended or unplanned pregnancy in women with SUD is much higher than women without SUD (Drescher-Burke, 2014; Heil et al., 2011, Robinowitz et al., 2016, Smith, Morse, & Busby, 2019; Terplan et al., 2015).

### **Lack of Access to Reproductive Care**



There are several reasons identified in the literature for why women with SUD have lower consistent use of reliable contraceptive methods, however poor access to reproductive care is frequently cited as a barrier to the consistent use of effective contraception (Black & Day, 2016; Black, Stephens, Haber, & Lintzeris, 2012; Drescher-Burke, 2014; Griffith et al., 2017; Meschke, McNeely, Brown, & Prather, 2018; Robinowitz et al., 2016; Terplan et al., 2016). Provider bias has also been recognized as a barrier; when women with SUD attempt to access contraceptive services, providers tend to prioritize treatment for substance use as well as screening and treatment for sexually transmitted diseases (Drescher-Burke, 2014; Griffith et al., 2017; Terplan et al., 2015). However, authors have also found that women who were screened and/or treated for sexually transmitted infections were also more likely to receive contraceptive counseling and to then elect a method of birth control (Robinowitz et al., 2016; Terplan et al., 2016). A study by Smith, Morse and Busby (2019) found that while women in treatment for opioid use disorder were clear about their intention to avoid pregnancy, they also reported low rates of consistent birth control use, election of accessible but less effective methods of pregnancy prevention, alongside limited access to primary care and gynecologic services.

Insurance plays a vital role in access. As previously stated, women self-report lack of insurance coverage as a barrier to SUD treatment. Most women are eligible for Medicaid once they become pregnant and remain insured 60 days postpartum. As of 2017, 11% of women in America remain uninsured (approximately 10.6 million women) and 17% receive insurance from Medicaid (Kaiser Family Foundation, 2018). Those who are uninsured, active in their SUD without access to SUD treatment or reproductive health services are at the highest risk for poor health outcomes. Unfortunately, 25 states have limited scope Medicaid programs, which limits funds towards family planning services (Kaiser Family Foundation, 2018). From 2009 to 2012,

48 percent of women entering substance use treatment facilities who were not pregnant were uninsured (Smith & Lipari, 2017). Women who are insured and/or are able to access SUD treatment may still lack access to reproductive health care. A focus group revealed that women with SUD consistently describe challenges in accessing contraception and family planning services, even while in treatment (Robinowitz et al., 2016).

### **Patient-Centered Treatment**

Before the 1970s, substance use treatment facilities followed a generic approach, with little recognition of the specific treatment needs of women (Greenfield & Grella, 2009). Many national institutions such as the Substance Abuse and Mental Health Services Administration (SAMHSA) and National Institute on Drug Abuse (NIDA) now recognize the need for women-centered programming as a cornerstone of effective SUD treatment and recovery. Women-centered programs focus on the treatment of SUD along with women-specific care and counseling for issues related to family counseling, behavioral health and reproductive health services (Krans et al., 2018; Robinowitz et al., 2016). Unique challenges that women face when enrolling into a treatment program include limited child-care availability, increased social stigma and fear of criminal or child welfare consequences (Chen et al., 2013; Saia et al., 2016).

Treatment centers specific to women and their needs were established to try to increase retention rates for women in inpatient treatment programs (Arfken, Klein, di Menza, & Schuster, 2001).

### **Integration of Reproductive Care**

Integration of reproductive health services with SUD treatment may help decrease the challenges women with SUD face in accessing contraception and increase contraceptive utilization. A study that interviewed 115 women in SUD treatment facilities found that women are more proactive about family planning and planning their futures while in treatment

(Robinowitz et al., 2016). MacAfee, Harfmann, Kolenic and Dalton (2017) found that women preferred integration of reproductive services with their SUD treatment. Improving access to comprehensive care and access to the full range of contraceptive options increases the use of reliable methods (Institute of Medicine, 2004).

### **Importance of Contraception**

Consistent use of effective contraception decreases rates of unintended pregnancy (Guttmacher Institute, 2019). An unintended pregnancy can trigger preexisting psychological conditions such as anxiety and depression for women (Biaggi, Conroy, Pawlby, & Pariante, 2016). Women are often at higher risk for relapse and overdose during prenatal and postpartum time because stress is a known trigger for relapse (American Society of Addiction Medicine, 2017). Women who relapse are also at higher risk for overdose and death. Improving access to evidence-based contraceptive counseling and the full range of contraceptive methods increases reproductive autonomy by supporting women to choose how and whether to plan or prevent pregnancy (Upadhyay, Dworkin, Weitz, & Foster, 2014).

Along with personal benefits to the woman, contraception use can also delay pregnancy until the woman is sober and free of substances. The effects of substance exposure on neonates are widely known (Bornstein et al., 2018). Prenatal substance use can increase the risk of preterm delivery, abruptio placenta, fetal growth restriction, intrauterine fetal demise, and neonatal abstinence syndrome (NAS) compared with infants who were not exposed to substances (Bornstein et al., 2018; Stanhope, Gill, & Rose, 2013). In 2012, medical bills for all infants treated for NAS totaled \$1.5 billion (Ko et al., 2017). Unintended pregnancies in women with SUD is associated with inadequate care, low birth weight and prematurity (Logan, Holcombe, Manlove, & Ryan, 2007). The number of women with opioid use disorder at labor and delivery

quadrupled from 1999 to 2014 (Haight, Ko, Tong, Bohm, & Callaghan, 2018). In order to decrease adverse outcomes and the incidence of high-risk pregnancies, the World Health Organization encourages contraceptive counseling and access to contraception for women with SUD (World Health Organization, 2014).

Integrating reproductive health care services into patient-centered SUD treatment models for women can alleviate reproductive health care disparities among women with SUD that result in myriad poor health outcomes for both women and children. Evidence-based contraceptive counseling empowers women with information and choice which improves health seeking behavior and increases reproductive autonomy by emphasizing each woman's choice to decide if and when she would like to have a child.

### **Theoretical Model**

The Social Cognitive Theory (SCT) is a health behavior theory that describes a dynamic, ongoing process in which personal factors, environmental factors, and human behavior exert influence upon each other (Bandura, 1986). SCT integrates concepts from cognitive, behaviorist, and emotional models of behavior change, but is centered around the assumption of reciprocal determinism. This means that a person can be both an agent for change and a responder to change (Glanz, Burke, & Rimer, 2018). The three main constructs of SCT are personal factors, environmental factors or behavior. Within each of the three main constructs there are a number of concepts that help illuminate the construct and help organize variables such as behavioral capability, expectations, self-efficacy, observational learning (modeling), and reinforcements (National Institutes of Health, 2005). Behavioral capability is the knowledge and skill needed to perform a given behavior. Expectations are anticipated outcomes of behavior. Self-efficacy is the confidence in one's ability to take action and overcome barriers.

The Social Cognitive Theory is used as a theoretical framework through which to understand the factors predicting uptake of reproductive health care services among women in treatment for substance use disorder (SUD). Personal factors that influence reproductive health in women with SUD are reproductive intention, contraceptive preference, and preference for integration of contraception into SUD treatment. Environmental factors include access to health care and engagement in SUD treatment. Human behavior can be measured by past and current contraceptive utilization. The three constructs, personal factors, environmental factors and behavior, are continually interacting and influencing one another, a dynamic known as reciprocal determinism (Bandura, 1986). Personal factors are influenced by environmental factors. For example, cost, convenience, and access are environmental factors that influence personal factors such as preference of contraception, or preference to integrate contraception into SUD treatment. This project is examining all the factors of the SCT that influence one another continuously. See figure 1.

### **Project Design**

This cross-sectional survey-based study was designed to measure how women engaged in residential treatment report their demand for and access to reproductive health care, their pregnancy intention, contraceptive utilization and preference for integrating reproductive health care with their current SUD treatment milieu. This project was approved by the Belmont Institutional Review Board in October 2019

### **Clinical Setting**

The study was conducted at a women's residential SUD treatment facility in Nashville, Tennessee. The facility is a non-profit, faith-based organization that treats women from the Southeastern United States for addiction to alcohol, opioids, and other illicit drugs. Inpatient

services for medical detox are available as needed. After detox, women begin the recommended 30-day residential treatment program, which includes medication assisted treatment (MAT), drug and alcohol withdrawal management, behavioral health, life skills, and peer led recovery meetings such as alcoholics anonymous (AA) and narcotics anonymous (NA).

The recommended residential treatment program is 30 days and women are eligible to participate in treatment if they are 18 years or older, speak English, and have Medicaid or private health insurance. Women who are uninsured may apply for scholarship funding available through grants. Most commercial and government-funded insurances cover 30 days of residential treatment. Women who receive a grant are approved for 30 days of residential treatment as well. Women are eligible for treatment regardless of their current pregnancy status. The facility has a total of 38 client rooms along with six detox beds. At capacity, the facility can provide residential treatment for 76 women. While engaged in care, women live together in a community and receive services as smaller groups of 10-12 women.

### **Project Population**

Women aged 18 to 51 years who were admitted and receiving treatment at the facility between October and December 2019 were eligible to participate in the study. Women over the age of 51 or those who had been in-house for less than 48 hours were not eligible to participate. The age of 51 years was selected because it is the average age of menopause and reproductive services are still essential up to that age (Terplan et al., 2016). Women must have been in-house for at least 48 hours as this is the average amount of time needed to regain cognition after ingestion of any substance (Terplan et al., 2016).

Convenience sampling was used to recruit eligible participants. Flyers describing the study were posted throughout the facility and the project leader made announcements during

weekly medical group meetings, describing the study and inviting women to complete the interview-led survey. Participation was voluntary and participant responses were kept confidential. No personally identifying information was collected by the project leader.

### **Sources of Data/Data Collection Instruments**

The survey used for this study was created by the project leader using questions from multiple other survey instruments to measure demographics, access to health care, specifically reproductive health care, reproductive intent, contraception utilization and preference for integration of reproductive health services with SUD treatment. See *Appendix* for adapted survey with standardized script.

Section I of the survey captured age in number, ethnicity, highest level of education and marital status. These demographic questions were adapted from the Centers for Disease Control (2018) National Survey of Family Growth.

Section II of the survey measured access to health care. Because the survey was completed using Qualtrics survey software, some skip logic was used in this section. A question about health insurance status was asked using a “yes/no” response. If the participant selected yes, the next question asked about the type of health insurance. However, if the participant selected no, using skip logic, the question about type of health insurance was omitted. Type of health insurance was measured using a multiple-choice question. Another question asked where specific services, such as well-women exam, STD screening, and prescription or method for birth control were received in the past. Multiple choice options were provided to determine where specific services were received. These questions were adapted from a study measuring the trends in contraceptive services of young women in America (Frost & Lindberg, 2019). A final question in

this section asked participants where they would go for care if they were sick. Multiple choice options are presented. This question was adapted from the Guttmacher Institute (2009).

Section III of the survey measured contraceptive utilization. The first question in this section asked whether certain contraceptive methods had been used in the past year. Responses were “yes/no”. The next question asked whether the participant was currently on a form of birth control. If the participant answered yes, the next question would ask what type of birth control they were on; however, if the participant answered no, using skip logic that question was omitted. A “yes/no” question asked whether cost had been a barrier in obtaining the preferred choice of birth control in the past. The next multiple choice question asked how the participant has paid for birth control in the past year. These questions were adapted from a survey from Guttmacher Institute (2009) which surveyed young adults about contraception utilization. The remaining questions in this section used skip logic. A “yes/no” question about condom use in the past six months was asked. If the participant answered no to using condoms in the past 6 months, the section would end. However, if the participant selected yes, further questions were asked. Further questions included primary purpose for using condoms with options of “STD prevention”, “pregnancy prevention”, or “both”. The next question asked about frequency of condom use with multiple choice responses of “Always”, “most of the time”, or “sometimes”. These questions were adapted from a survey which asked about intention to have sexual intercourse without a condom (Duran, Ferraces, Rodriguez, Rio & Sabucedo, 2017).

Section IV of the survey measured reproductive intent. One multiple choice question was adapted to measure desire to become pregnant in the next year. The question was adapted from “Improving Contraception Uptake Baseline Questionnaire” (Black & Day, 2016). Using skip logic, pregnancy intention was not asked to those who had indicated a previous tubal ligation or



hysterectomy. Section V of the survey measured preference for integration. Questions for this section were adapted from Bich, Korthuis, Thu, Dinh and Minh (2016). The original study measured the preference for integrating SUD treatment into existing HIV treatment plans. Although the variables are different for this study, the logic of integration translates well. Skip logic was used for these questions. The section begins with a “yes/no” question asking whether the participant would feel comfortable speaking about contraception at the facility where the study took place. If the participant answered yes, the next question would ask which provider they would feel most comfortable talking to (doctors, nurse practitioners, pharmacists, nurses, therapists, or case managers). If the participant answered no, this question was omitted. The next question asked whether the participant would be interested in receiving birth control upon discharge from the facility. If the participant answered either yes or not sure, the next question would ask them which method of contraception they would be interested in, which is a multiple choice question. If the participant answered no, the survey ends. The question about which method of contraception they would be interested in was added to the survey by the request of the facility and stakeholders.

The adapted survey was reviewed for content validity by the project advisor and a Doctor of Nursing Practice nurse practitioner who works with a similar population as the study population. Because the survey was adapted from various other surveys and is intended to provide descriptive statistics, it cannot be deemed valid or reliable. The survey was piloted with six non-medical clinical associates at the facility who are in recovery for SUD and completed residential treatment either at the facility or at a similar inpatient facility.

### **Data Collection Process/Procedures**

The project leader used a standardized script to guide participants through the survey and input survey responses into a laptop computer using Qualtrics survey software. To eliminate barriers to participation related to response fatigue, literacy and health literacy in this population, the project leader read the questions aloud for each participant using the standardized script. The survey took approximately seven minutes to complete. The surveys were completed one at a time in a private room at the facility. Participation was voluntary, and no protected health information was collected. A letter of invitation with implied consent was presented to participants. The letter clearly stated that participation in the study does not promise access to any services. In order to thank participants for their time, a candy bar was given at the end of the survey. A resource packet with local health departments and information about different contraception options was offered to all participants.

### **Data Analysis**

Data was collected using Qualtrics survey software. Collected data was then entered into SPSS software for analysis. Analysis included descriptive statistics to explore demographics, health care access, contraception utilization, reproductive intent and preference for integration.

### **Results**

From the months of October 2019 to December 2019, there were 219 admissions into the residential program. A total of 108 women completed the survey (N=108). The response rate was 49%. The median age of participants was 32 years. Three-fourths (74%) were Caucasian, and nearly half had completed a high school diploma or earned a GED (46.3%). Over half (54.6%) of the sample were single, never married. Participants' demographic characteristics are summarized in Table 1.

### **Access to Care**

Three-fourths (74.1%) of the sample had health insurance at the time of the survey. Of the 80 that had health insurance, 93% were covered by Medicaid or a type of government-assistance plan. In response to the item “when you are sick, where do you go for care?”, 36 (33.3%) women indicated care from a primary care provider (PCP), 38 (35.1%) women reported care from an urgent care or walk-in clinic, and 34 (31.6%) women reported having visited Emergency Department. For reproductive healthcare, a majority of women (63%) reported having visited a private doctor’s office for a well woman exam; and about half (48.1%) reported receiving STD screenings at a community or public health clinic such as the health department. However, half of the women (53.7%) reported having received a prescription or method of birth control from a private doctor’s office, compared to 36.1% that received this from a community or public health clinic. Figures 2, 3, 4, and 5 depict women’s access to health care and all data related to access to care are summarized in Table 2.

### **Reproductive Intent and Contraception Utilization**

Twenty women (18.5%) reported having had a tubal ligation or a hysterectomy and so were not asked about their reproductive intent. Of the remaining women (n=88), the majority (85.2%) reported not wanting to become pregnant in the next year, 6 (6.8%) wanted to become pregnant in the next year, 1 (1.1%) was not sure, and 6 (6.8%) reported being “okay” either way. All data related to reproductive intent may be found in Table 3.

Participants’ responses about utilization of contraceptive methods were categorized based on efficacy and likelihood of becoming pregnant using research adapted by the Centers of Disease Control (2018). Tier 1 includes the implant, and an intrauterine device (IUD). Tier 1 methods are considered to be the most effective contraceptive method with less than one

pregnancy per 100 women in one year (Trussell, Aiken, Micks, & Guthrie, 2018). Of the women who had not had a hysterectomy or tubal ligation ( $n=88$ ), 16 (18.2%) women reported having used tier one methods in the past year. When asked about current use, 14 (15.9%) reported using tier 1 methods. Tier 2 includes oral contraceptives, patches, vaginal ring, and injectables. Tier 2 methods are moderately effective with four to seven pregnancies per 100 women in one year (Trussell et al., 2018). Of the women who had not had a hysterectomy or tubal ligation ( $n=88$ ), 27 (30.6%) women reported having used tier 2 methods in the past year. When asked about current use, 11 (12.5%) women reported use of tier 2 methods. Tier 3 includes withdrawal method, rhythm method, emergency contraception and condoms. Tier 3 methods are the least effective methods with more than 13 pregnancies per 100 women in one year (Trussell et al., 2018). Of the women who had not had a hysterectomy or tubal ligation ( $n=88$ ), 65 (73.8%) women reported having used tier 3 contraceptive methods in the past year. The vast majority of women (71.6%) of women reported that they were not using any form of contraception at the time of the survey. Tables 4a and 4b provide a full report of contraceptive utilization in the past year and utilization at the time of the survey.

One-fourth (25.9%) of the participants reported cost as a barrier to obtaining the birth control of their choice. When asked how they paid for their birth control in the last year, 42 (38.8%,  $N=108$ ) women reported Medicaid insurance coverage, and 57 (52.7%,  $N=108$ ) reported they had not used birth control in the past year. About half of the women ( $n=52$ ) reported using condoms in the past six months. When asked frequency of condom use, 12 (23%) reported always using condoms, 24 (46.2%) reported using condoms most of the time, and 16 (30.7%) reported using condoms sometimes. Of the 52 women who reported condom use in the past six months, 18 (34.6%) reported using condoms for STD prevention, five (9.6%) reported using

condoms for pregnancy prevention, and 29 (55.7%) reported using them for both STD prevention and pregnancy prevention. Table 5a and 5b summarizes how women reported paying for their birth control and their condom utilization.

### **Preference for Integration**

In response to the question *“If we could provide you with a method of birth control of your choice before you leave, would you be interested?”*, the majority (69.4%) said yes, and 98.1% of women stated they would feel comfortable talking about birth control while in treatment for substance use disorder. When asked who they would feel most comfortable talking to about birth control, 54 (50%) stated nurses, 25 (23.1%) stated therapists, 25 (23.1%) stated nurse practitioners or doctors, and 4 (3.7%) stated case managers. All data related to preference for integration is summarized in Table 6.

### **Discussion**

Although 85% of participants reported a desire to avoid pregnancy in the next year, only one-third (33.6%) were using any form of contraception at the time of the survey. Although the rate of effective contraceptive use was low, preference for integration of contraception with SUD treatment was high. The majority of women responded with a preference to integrate access to contraception with their treatment for SUD and almost 70% reported that they would choose to initiate contraception prior to discharge from treatment if it were made available and cost were no obstacle. Of the women who were interested in integration of services, 14.8% indicated preference for an IUD, 13.9% indicated preference for an implant, 16.7% indicated preference for oral contraception, 22.2% indicated preference for injectables and 1.8% indicated preference for the patch. This finding suggests that while the preference for integration of services was

almost unanimous, women express preference for a variety of methods, but their responses suggest that removing cost as a barrier would drive the election of more effective methods.

While half of the women were most comfortable speaking about contraception to nurses at their SUD facility, the other half were most comfortable with either a therapist, case manager or nurse practitioner. This suggests the importance of trust and relationship in the discussion of family planning and that there is variability around whom a woman may feel most comfortable. This echoes literature that supports all staff training in contraceptive counseling as an important aspect of improving access; hence, it is vital that all disciplines are trained in contraceptive counseling. By educating and training all disciplines in a SUD treatment facility, women have an equal opportunity to approach a conversation about contraception with whoever they are most comfortable with.

Previous studies suggest that women with SUD have a decreased uptake of contraception due to lack of access to health care, specifically reproductive health care. This study found that only 63% of women had ever received a well-women exam at a private doctor's office and only 53% had ever received a prescription or method of birth control from a private doctor's office. This supports existing literature on the disparities in access to reproductive healthcare documented in this vulnerable population which is also evidenced by their use of urgent care or emergency departments for care when they are sick (66%). This suggests that women with SUD might not receive continuous and consistent care from a provider who is aware of their reproductive health history and SUD diagnosis.

Compared to previous studies, this study found a higher uptake of long-acting reversible contraception (LARC) in this sample compared to women in previous studies. Previous studies published rates of LARC uptake among women with SUD as under 6% (Smith et al., 2019;

Terplan et al., 2016). However, this study shows a 13% uptake of LARCs. This percentage lags behind the LARC uptake in the general population at 15% but is encouraging (National Survey of Family Growth, 2017). The finding that 68.4% of women reported using less reliable methods of contraception such as withdrawal method, rhythm method, emergency contraception and condoms may also be experiencing cost as a barrier to more reliable methods, along with access to a provider, availability and education. The results show that 14 (12.9%) women came into treatment with an existing LARC and 31 (28.7%) reported preference for a LARC in the absence of cost as a barrier. This suggests that women who came into treatment with a LARC report a preference to continue using LARCs to prevent pregnancy. This finding may be leveraged as an asset in the group treatment milieu because peer influence can be a powerful tool in decision making when it comes to contraception selection (Smith, Morse, & Busby, 2019).

Of the 48% of women who reported using condoms in the past six months, only 23% of those reported always using condoms. Of the women who reported using condoms, 55.7% reported using them for pregnancy prevention and STD prevention. Not only are women reporting high rates of using an ineffective method to prevent pregnancy but are also using this ineffective method inconsistently. If women were offered the method of contraception they preferred, the health outcomes for women and children associated with unintended pregnancy could improve.

These findings add to the existing literature that supports integration of contraception into SUD treatment. Similar to previous findings, this study found that women do indeed prefer the integration of contraception into SUD treatment. These results show us that a majority of women enter treatment without any method of contraception, and if these services are not offered during treatment, the likelihood of women receiving contraception elsewhere once discharged is

unlikely. Known barriers to reproductive health care will continue to decrease contraceptive utilization in this population. To support and promote reproductive autonomy and women's right to decide whether and how to prevent or plan future pregnancies, treatment facilities should elicit and respond carefully to the preferences of women before any intervention is implemented.

Because the survey was conducted at a facility where a majority of the women have some form of insurance, the responses about cost as a barrier to accessing contraception might be different compared to women who do not have insurance. In this study, 25.9% of women reported cost as a barrier to receiving a method of contraception of their choice. Interestingly, 25.9% of women did not have insurance at the time of the survey. This study did not ask about sexual orientation, number of sexual partners, or knowledge of contraceptives; in previous literature these variables have been of interest. The participating 108 women constituted 49% of the population at one inpatient treatment facility in Nashville, Tennessee during the span of two months. As such, the preferences and experiences expressed by these women may not be an accurate representation of the population across the state, let alone the population across the country. However, the study sample does demographically represent the larger population of women in Tennessee who are currently accessing treatment for SUD and thus serves as a valuable source of information about the value of eliciting patient preferences as first step toward improving access to reproductive health for this population.

### **Conclusion**

Women in SUD treatment have unmet reproductive health needs. Of the approximately one-third of women who reported current use of contraception, 13% entered treatment with a LARC. However, 85% did not want to become pregnant in the next year. Women in this study voiced a strong preference for integrated contraception and SUD treatment, but a minority of



women preferred separate care for SUD treatment and contraception. Integrating contraception with SUD treatment has shown to increase rates of effective contraceptive use, however the preferences of women should be considered before implementing any interventions. Future research should explore whether women prefer contraceptive counseling as a group or individually. This study highlights the importance of eliciting patient preference for service integration as well as responding to the expressed preferences of women by improving access to all methods of contraception.

### References

- Albright, B. B., & Rayburn, W. F. (2009). Substance abuse among reproductive age women. *Obstetrics and Gynecology Clinics of North America*, 34(4), 891-906.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed.), Arlington, VA: American Psychiatric Publishing.
- American Society of Addiction Medicine [ASAM]. (2017). Public policy statement on substance use, misuse, and use disorders during and following pregnancy, with an emphasis on opioids. Retrieved from [https://www.asam.org/docs/default-source/public-policystatements/substance-use-misuse-and-use-disorders-during-and-following-pregnancy.pdf?sfvrsn=644978c2\\_4](https://www.asam.org/docs/default-source/public-policystatements/substance-use-misuse-and-use-disorders-during-and-following-pregnancy.pdf?sfvrsn=644978c2_4).
- Arfken, C. L., Klein, C., di Menza, S., & Schuster, C. R. (2001). Gender differences in problem severity at assessment and treatment retention. *Journal of Substance Abuse Treatment*, 20, 53-57.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Biaggi, A., Conroy, S., Pawlby, S., & Pariante, C. M. (2016). Identifying the women at risk of antenatal anxiety and depression: A systematic review. *Journal of Affective Disorders*, 191, 62-77.
- Bich, D. N., Korthuis, P. T., Thu, T. N., Dinh, H. V., & Minh, G. L. (2016). HIV patients' preference for integrated models of addiction and HIV treatment in Vietnam. *Journal of Substance Abuse Treatment*, 69, 57-63.

- Black, K. I., & Day, C. A. (2016). Improving access to long-acting contraceptive methods and reducing unplanned pregnancy among women with substance use disorders. *Substance Abuse: Research and Treatment, 10*(Suppl 1), 27-33.
- Black, K. I., Stephens, C., Haber, P. S., & Lintzeris, N. (2012). Unplanned pregnancy and contraceptive use in women attending drug treatment services. *Australian and New Zealand Journal of Obstetrics and Gynecology, 52*, 146-150.
- Bornstein, M., Gipson, J. D., Bleck, R., Sridhar, A., & Berger, A. (2018). Perceptions of pregnancy and contraceptive use: An in-depth study of women in Los Angeles methadone clinics. *Women's Health Issues, 1*-6.
- Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration (2014). *The TEDS Report: Gender Differences in Primary Substance of Abuse across Age Groups*. Rockville, MD: SAMHSA.
- Centers for Disease Control (2018). National Survey of Family Growth, FEMALE Questionnaire 2015-2017. OMB No. 0920-0314. Retrieved from [https://www.cdc.gov/nchs/data/nsfg/NSFG\\_2015-2017\\_FemaleCAPlite\\_forPUF.pdf](https://www.cdc.gov/nchs/data/nsfg/NSFG_2015-2017_FemaleCAPlite_forPUF.pdf)
- Chen, L. Y., Strain, E. C., Crum, R. M., & Mojtabai, R. (2013). Gender differences in substance abuse treatment and barriers to care among persons with substance use disorders with and without comorbid major depression. *Journal of Addiction Medicine, 7*(5), 325-334.
- Drescher-Burke, K. (2014). Contraceptive risk-taking among substance-using women. *Qualitative Social Work, 13*(5), 636-653.
- Duran, M., Ferraces, M. J., Rodriguez, M., Rio, A., & Sabucedo, J. M. (2017). Intention to have sexual intercourse without a condom. *Trames, 21*(1), 15-32.

- Finer, L. B., & Zolna, M. (2014). Shifts in intended and unintended pregnancies in the United States, 2001-2008. *American Journal of Public Health, 104*(Suppl 1), S44-S48.
- Frost, J. J. & Lindberg, L. D. (2019). Trends in receipt of contraceptive services: Young women in the U.S., 2002-2015. *American Journal of Preventive Medicine, 56*(3), 343-351.
- Glanz, K., Burke, L. E., & Rimer, B. K. (2018). Health behavior theories. In J. B. Butts & K. L. Rich (3<sup>rd</sup> Eds.), *Philosophies and Theories for Advanced Nursing Practice* (241-265). Burlington, MA: Jones & Bartlett Learning.
- Greenfield, S. F., & Grella, C. E. (2009). What is “women-focused” treatment for substance use disorders? *Psychiatric services, 60*(7), 880-882.
- Griffith, G., Kumaraswami, T., Chrysanthopoulou, S., Mattocks, K., & Clark, R. (2017). Prescription contraception use and adherence by women with substance use disorders. *Addiction, 112*(9), 1638-1646.
- Guttmacher Institute (2009). Survey of young adults 2009: The fog zone. Field research corporation: San Francisco, CA.
- Guttmacher Institute. (2019). Unintended pregnancy in the United States: Fact sheet. Retrieved from [https://www.guttmacher.org/sites/default/files/factsheet/fb-unintended-pregnancy-us\\_0.pdf](https://www.guttmacher.org/sites/default/files/factsheet/fb-unintended-pregnancy-us_0.pdf)
- Haight, S. C., Ko, J. Y., Tong, V. T., Bohm, M. K., & Callaghan, W. M. (2018). Opioid use disorder documented at delivery hospitalization-United States, 1999-2014. *Morbidity and Mortality Weekly Report, 67*(31), 845-849.
- Heil, S. H., Jones, H. E., Arria, A., Kaltenbach, K., Coyle, M., Fischer, G., . . . Martin P. R. (2011). Unintended pregnancy in opioid-abusing women. *Journal of Substance Abuse Treatment, 40*, 199-202.

Institute of Medicine. (2004). *New frontiers in contraceptive research: A blueprint for action*. Washington, D.C.: The National Academies Press.

Kaiser Family Foundation. (2018). *Women's health insurance coverage fact sheet*. Based on the census bureau's American community survey, 2017.

Ko, J. Y., Wolicki, S., Barfield, W. D., Patrick, S. W., Broussard, C. S., Yonkers, K. A., . . . Iskander, J. (2017). CDC grand rounds: Public health strategies to prevent neonatal abstinence syndrome. *Morbidity and Mortality Weekly Report*, *66*, 242-245.

Krans, E. E., Bobby, S., England, M., Gedekoh, R. H., Chang, J. C., Maguire, B., . . . English, D. H. (2018). The pregnancy recovery center: A women-centered treatment program for pregnant and postpartum women with opioid use disorder. *Addictive Behaviors*, *86*, 124-129.

Logan, C., Holcombe, E., Manlove, J., Ryan, S. (2007). *The consequences of unintended childbearing: A white paper*. *Child Trends and the National Campaign to Prevent Teen and Unplanned Pregnancy*. Washington, D.C.

MacAfee, L. K., Harfmann, R., Kolenic, G., & Dalton, V. K. (2017). Barriers to reproductive health services for women with opioid use disorder in substance use treatment across Michigan. *Contraception*, *96*(4), 297.

Meschke, L. L., McNeely, C., Brown, K. C., & Prather, J. M. (2018). Reproductive health knowledge, attitudes, and behaviors among women enrolled in medication-assisted treatment for opioid use disorder. *Journal of Women's Health*, *27*(10), 1215-1224.

Metz, V., Köchl, B., & Fischer, G. (2012). Should pregnant women with substance use disorders be managed differently? *Neuropsychiatry (London)*, *2*(1), 29-41.

National Institute of Drug Abuse (2018). Sex and gender differences in substance use. The

National Institute of Health website. Retrieved from

<https://www.drugabuse.gov/publications/drugfacts/substance-use-in-women>.

National Institutes of Health. (2005). Theory at a glance: A guide for health promotion practice

(2<sup>nd</sup> ed.). U.S. Department of Health and Human Services website. Retrieved from

[https://cancercontrol.cancer.gov/brp/research/theories\\_project/theory.pdf](https://cancercontrol.cancer.gov/brp/research/theories_project/theory.pdf).

National Survey of Family Growth. (2017). Key statistics from the national survey of family

growth: Intrauterine device. Retrieved from

[https://www.cdc.gov/nchs/nsfg/key\\_statistics/i.htm#iud](https://www.cdc.gov/nchs/nsfg/key_statistics/i.htm#iud)

Robinowitz, N., Muqueeth, S., Scheibler, J., Salisbury-Afshar, E., & Terplan, M. (2016). Family

planning in substance use disorder treatment centers: Opportunities and challenges.

*Substance Use and Misuse*, 51(11), 1477-1483.

Saia, K. A., Schiff, D., Wachman, E. M., Mehta, P., Vilkins, A., Sia, M., . . . Bagley, S. (2016).

Caring for pregnant women with opioid use disorder in the USA: Expanding and

improving treatment. *Current Obstetrics and Gynecology Reports*, 5, 257-263.

Sharma A. K., Aggarwal, O. P., & Dubey, K. K. (2002). Sexual behavior of drug users: Is it

different? *Preventative Medicine*, 34(5), 512-515.

Smith, K., & Lipari, R. (2017). Women of childbearing age and opioids. *The CBHSQ Report:*

*January 2017*. Center for Behavioral Health Statistics and Quality, Substance Abuse and

Mental Health Services Administration: Rockville, MD.

Smith, C., Morse, E., & Busby, S. (2019). Barriers to reproductive healthcare for women with

opioid use disorder. *Journal of Perinatal & Neonatal Nursing*, 33(2), E3-E11.

- Stanhope, T. J., Gill, L. A., & Rose, C. (2013). Chronic opioid use during pregnancy: Maternal and fetal implications. *Clinics in Perinatology*, *40*(3), 337-350.
- Substance Abuse and Mental Health Services Administration. (2017). *Key Substance Use and Mental Health Indicators in the United States: Results from the 2016 National Survey on Drug Use and Health*. Retrieved from <https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2016/NSDUH-FFR1-2016.pdf>
- Substance Abuse and Mental Health Services Administration. (2020). *2018 National Survey on Drug Use and Health: Women*. Retrieved from [https://www.samhsa.gov/data/sites/default/files/reports/rpt23250/5\\_Women\\_2020\\_01\\_14\\_508.pdf](https://www.samhsa.gov/data/sites/default/files/reports/rpt23250/5_Women_2020_01_14_508.pdf)
- Terplan, M., Hand, D. J., Hutchinson, M., Salisbury-Afshar, E., & Heil, S. H. (2015). Contraceptive use and method choice among women with opioid and other substance use disorders: A systematic review. *Preventative Medicine*, *80*, 23-31.
- Terplan, M., Lawental, M., Connah, M. B., & Martin, C. E. (2016). Reproductive health needs among substance use disorder treatment clients. *Journal of Addiction Medicine*, *10*(1), 20-25.
- Thacker, S. B., Ikeda, R. M., Giesecker, K. E., Mendelsohn, A. B., Saydah, S. H., Curry, C. W., & Yuan, J. W. (2005). The evidence base for public health informing policy at the centers for disease control and prevention. *American Journal of Preventive Medicine*, *29*(3), 227-233.

Than, L. C., Honein, M. A., Watkins, M. L., Yoon, P. W., Daniel, K. L. & Correa, A. (2005).

Intent to become pregnant as a predictor of exposures during pregnancy: Is there a relation? *Journal of Reproductive Medicine*, 50(6), 389-396.

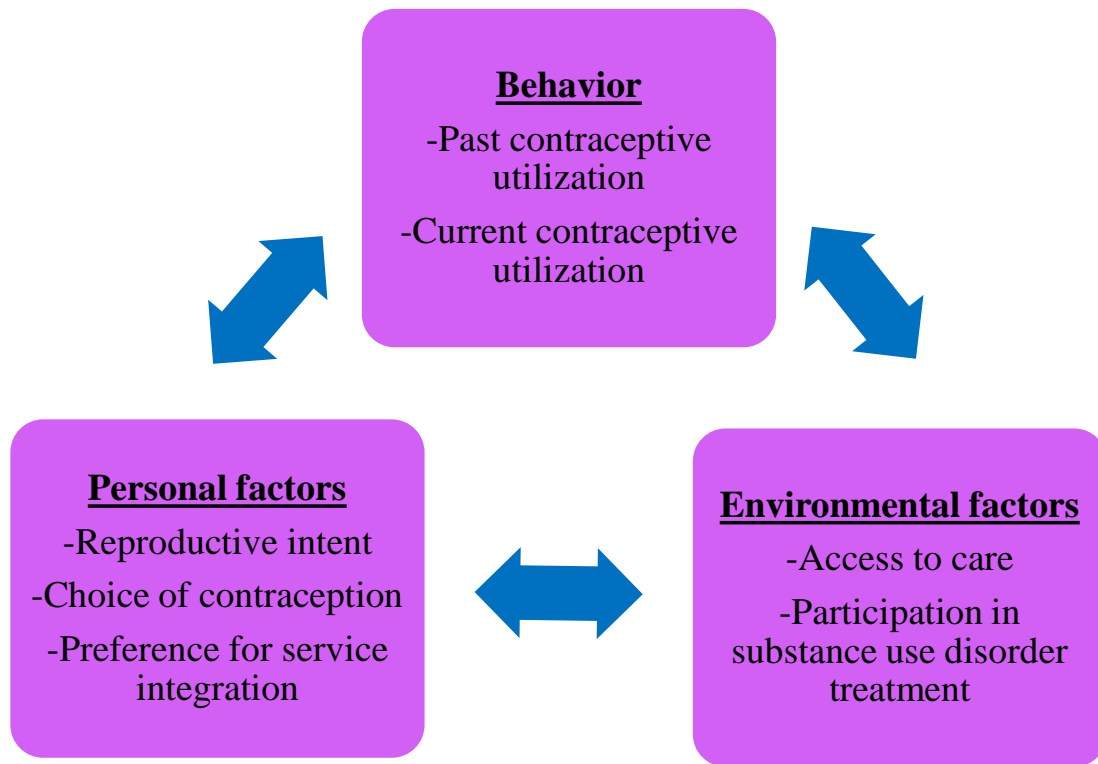
Trussell, J., Aiken, A.A., Micks, E., & Guthrie, K.A. (2018). Efficacy, safety, and personal considerations. In R. Hatcher, A. Nelson, J. Trussell, C. Cwiak, P. Cason, M. Policar, A. Edelman, A. Aiken, J. Marrazzo, & D. Kowal (Eds.), *Contraceptive technology* (21 ed.). New York, NY: Ayer Company Publishers, Inc.

Upadhyay, U. D., Dworkin, S. L., Weitz, T. A., & Foster, D. G. (2014). Development and validation of a reproductive autonomy scale. *Studies in Family Planning*, 45(1), 19-41.

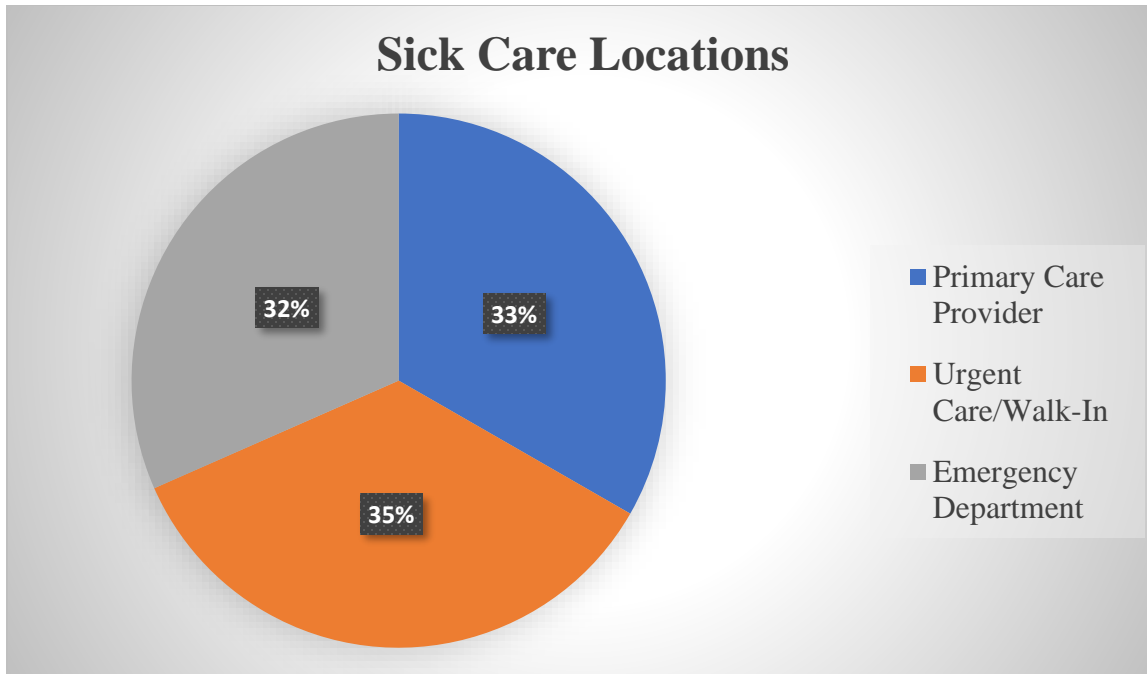
World Health Organization (2014). *Guidelines for identification and substance use and substance use disorders in pregnancy*. Geneva, Switzerland: WHO Document Production Services.



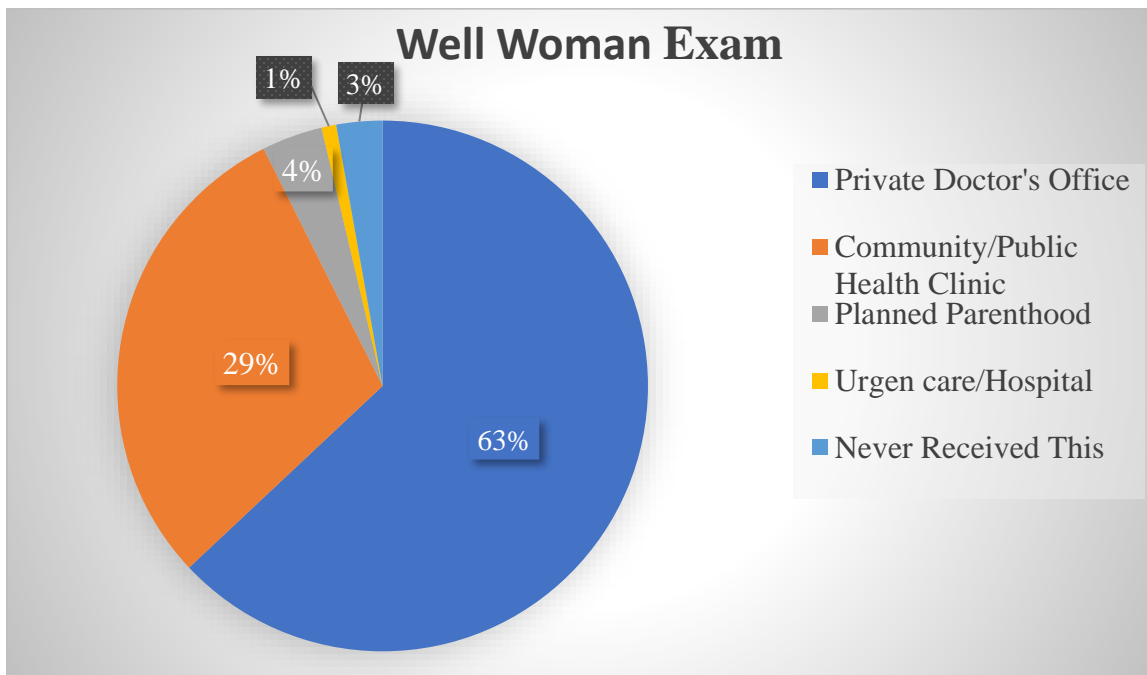
## Figures



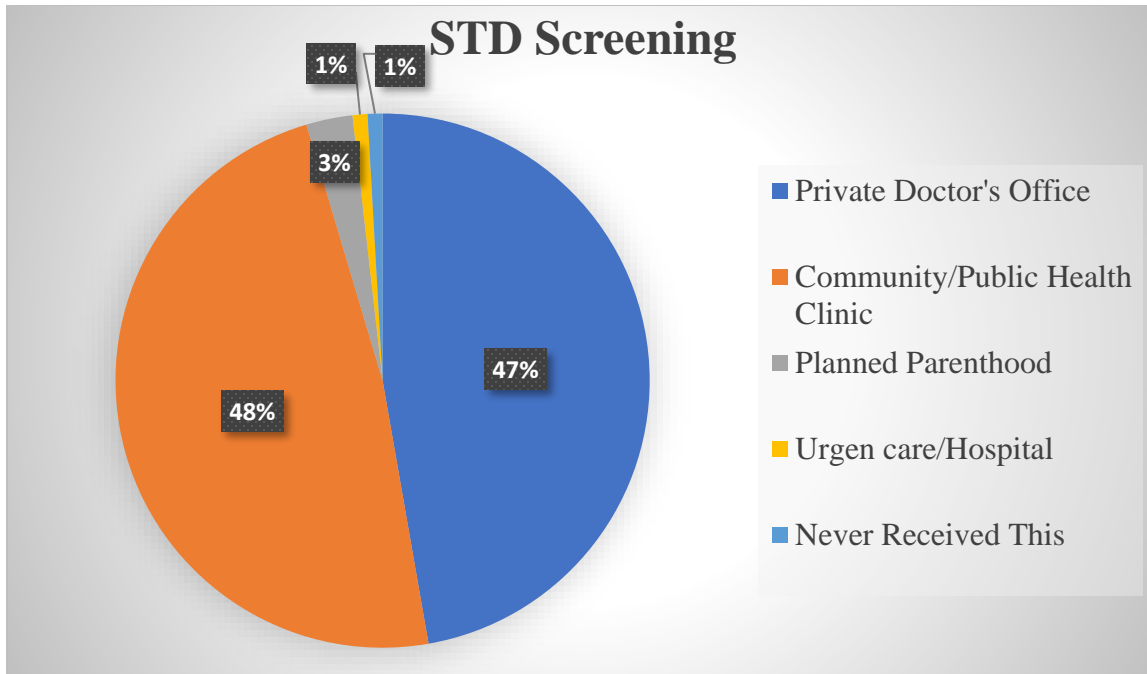
**Figure 1.** Social Cognitive Theory



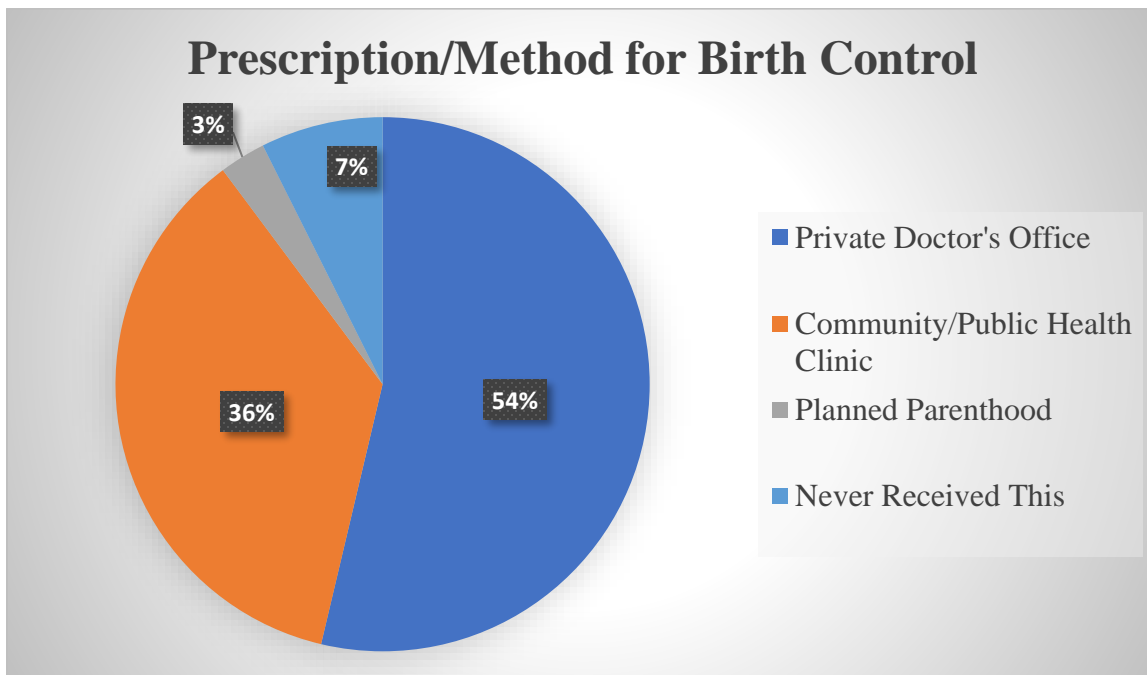
**Figure 2.** Locations utilized for treatment of illness among women in inpatient treatment for substance use disorder in Nashville, TN (N=108).



**Figure 3.** Locations utilized for Well Woman Exams among women in inpatient treatment for substance use disorder in Nashville, TN (N=108).



**Figure 4.** Locations utilized for STD screenings among women in inpatient treatment for substance use disorder in Nashville, TN (N=108).



**Figure 5.** Locations utilized for obtaining a prescription or method for birth control among women in inpatient treatment for substance use disorder in Nashville, TN (N=108).

### Tables

**Table 1.** Sample demographics of women in inpatient treatment for substance use disorder in Nashville, TN (N=108).

Characteristic	<i>n</i> (%)
Age (years)	
19-29	37 (34.3)
30-40	59 (54.6)
41-51	12 (11.1)
Ethnicity	
African American/Black	18 (16.7)
Hispanic/Latino	2 (1.9)
Caucasian/White	80 (74.1)
Native American/American Indian	3 (2.8)
Asian/Pacific Islander	1 (0.9)
Mixed Race	4 (3.7)
Education	
Some High School	21 (19.4)
High School or GED	50 (46.3)
Some College	18 (16.7)
2-year college degree	12 (11.1)
4-year college degree	6 (5.6)
Graduate or professional degree	1 (0.9)
Marital Status	
Single, never married	59 (54.6)
Married	17 (15.7)
Divorced or annulled	18 (16.7)
Separated, not divorced	14 (13)
Insurance (Y/N)	
Yes	80 (74.1)
No	28 (25.9)
Insurance Type	
Employer	2 (1.9)
Purchased Directly/Private	4 (3.7)
Medicaid/Government-assistance plan	74 (68.5)

**Table 2.** Access to health care providers and preferred locations for treatment of illnesses among women in inpatient treatment for substance use disorder in Nashville, TN (N=108).

Access to Care	<i>n</i> (%)
Sick Care	
Primary Care Provider	36 (33.3)
Urgent Care/Walk-In	38 (35.1)
Emergency Department	34 (31.6)

Well Woman Exam	
Private Doctor's Office	68 (63)
Community/Public Health Clinic	32 (29.6)
Planned Parenthood Clinic	4 (3.7)
Urgent Care/Hospital	1 (0.9)
Never received this service	3 (2.8)
STD Screening	
Private Doctor's Office	51 (47.2)
Community/Public Health Clinic	52 (48.1)
Planned Parenthood Clinic	3 (2.8)
Urgent Care/Hospital	1 (0.9)
Never received this service	1 (0.9)
Prescription/Method of Birth Control	
Private Doctor's Office	58 (53.7)
Community/Public Health Clinic	39 (36.1)
Planned Parenthood Clinic	3 (2.8)
Urgent Care/Hospital	0
Never received this service	8 (7.4)

**Table 3.** Reproductive intent for the next year among women in inpatient treatment for substance use disorder in Nashville, TN (n=88). This question was not asked to 20 women who indicated tubal ligation or hysterectomy.

Reproductive Intent	n (%)
Would like to become pregnant	6 (6.8)
Do not want to become pregnant	75 (85.2)
Not sure	1 (1.1)
Okay either way	6 (6.8)

**Table 4a.** Contraception utilization within the past year among women in inpatient treatment for substance use disorder in Nashville, TN (N=108).

Methods of Contraception	Yes [n (%)]	No [n (%)]
Oral Contraceptives	12 (11.1)	96 (88.9)
Condoms	56 (51.9)	52 (48.1)
Injectables	13 (12)	95 (88)
Patch	1 (0.9)	107 (99.1)
Intrauterine Devices (IUD)	9 (8.3)	99 (91.7)
Implant	7 (6.5)	101 (93.5)
Vaginal Ring	1 (0.9)	107 (99.1)
Rhythm Method	3 (2.8)	105 (97.2)
Emergency Contraception	6 (5.6)	102 (94.4)
Withdrawal Method	23 (21.3)	85 (78.7)
Tubal Ligation/Hysterectomy	20 (18.5)	88 (81.5)

**Table 4b.** Contraception utilization at the time of the survey among women in inpatient treatment for substance use disorder in Nashville, TN (n=88). This is a sub-sample after removing women with hysterectomies and tubal ligations.

Contraception Utilization	n (%)
<b>Current Contraception Use</b>	
Yes	25 (28.4%)
No	63 (71.6%)
<b>Method</b>	
Tier 1	
IUD	7 (7.9%)
Implant	7 (7.9%)
Tier 2	
Oral contraceptives	6 (6.8%)
Injectables	5 (5.6%)

**Table 5a.** Payment methods for contraception in the past year (N=108).

Payment Method	n (%)
Private Insurance	3 (2.8)
Medicaid or government-assistance plan	42 (38.9)
Out-of-pocket payment	1 (0.9)
No payment necessary	5 (4.6)
Not applicable (Haven't received birth control in past year)	57 (52.8)

**Table 5b.** Condom utilization in the past six months.

Condom Utilization	n (%)
Yes	52 (48.1)
No	56 (51.9)
<b>*Primary Purpose for use</b>	
STD Prevention	18 (34.6)
Pregnancy Prevention	5 (9.6)
Both	29 (55.7)
<b>*Frequency of Use</b>	
Always	12 (23)
Most of the time	24 (46.2)
Sometimes	16 (30.7)

\*Percentages reported as a sub-sample of 52 women who answered yes to using condoms.

**Table 6.** Preference for integration of birth control with substance use disorder treatment programs.

Preferences for Integration	n (%)
Most Comfortable Talking About Birth Control With	
Nurse Practitioners/Doctors	25 (23.1)
Nurses	54 (50)
Therapists	25 (23.1)
Case Managers	4 (3.7)
Interest in Receiving Birth Control Before Discharge	
Yes	75 (69.4)
No	30 (27.8)
Not Sure	3 (2.8)
Choice of Contraception if Provided Before Discharge	
Tier 1	
IUD	16 (14.8)
Implant	15 (13.9)
Tier 2	
Oral Contraception	18 (16.7)
Injectables	24 (22.2)
Patch	2 (1.8)
None (I do not want any form)	33 (30.5)

## Appendix

### Adapted survey

*Thank you so much for agreeing to participate in this women's health and birth control survey. I really appreciate your time. Over the next few minutes I will be asking you some questions about to your personal health, the health care you receive, and some specific questions about birth control. When I say birth control I am referring to any way you would prevent pregnancy including pulling out, condoms, the pill, the shot, the patch, IUDs, implants. You do not have to answer the questions you don't want to. Please stop me at any time if you have questions about what I say. I am happy to answer any questions and repeat any information. Everything we say during this session is confidential, including all of your answers and any personal information. At the end of this survey you will receive a candy bar and a resource packet. Are you ready to get started?*

*I'd like to start off by asking you a few general questions about yourself.*

### Section I: Demographics

1. How old are you? (enter age in whole numbers) \_\_\_\_\_
2. Please specify your ethnicity:
  - a. African American or Black
  - b. Hispanic or Latino
  - c. White
  - d. Native American or American Indian
  - e. Asian/Pacific Islander
  - f. Other: \_\_\_\_\_
3. What is the highest level of education you have completed?
  - a. Some high school
  - b. High school diploma
  - c. Some college credit, but did not graduate college
  - d. 2-year college degree
  - e. 4-year college degree
  - f. Graduate or professional school
4. What is your marital status?
  - a. Single, never married
  - b. Married
  - c. Divorced or annulled
  - d. Separated, not divorced
  - e. Widowed



*The next few questions will be about health care.*

**Section II: Access to Care**

5. Do you currently have health insurance?
  - a. Yes
  - b. No
  
6. What type of health insurance do you have?
  - a. Insurance through a current or former employer or union
  - b. Insurance purchased directly from an insurance company
  - c. Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or disabilities
  - d. TRICARE or other military health care
  - e. VA
  
7. If you are sick, where do you go for care?
  - a. My primary care provider
  - b. Retail health clinic/walk-in clinic
  - c. Urgent Care
  - d. Emergency Department
  - e. Other: \_\_\_\_\_

*I am going to list off specific services that you may have received. Let me know where you received these services such as doctor's office, planned parenthood, hospital/urgent care, etc. If you have not received a service, simply state "I have not received that service before".*

8. For the following questions, please mark where you received each service.
  - a. Well-women exam
    - i. Private doctor's office/HMO
    - ii. Community or Public health clinic
    - iii. Family planning/Planned Parenthood clinic
    - iv. Urgent care/hospital
    - v. Never received these types of services
  - b. STD screening
    - i. Private doctor's office/HMO
    - ii. Community or Public health clinic
    - iii. Family planning/Planned Parenthood clinic
    - iv. Urgent care/hospital
    - v. Never received these types of services
  - c. Prescription for birth control or a method of birth control
    - i. Private doctor's office/HMO
    - ii. Community or Public health clinic
    - iii. Family planning/Planned Parenthood clinic
    - iv. Urgent care/hospital
    - v. Never received these types of services

**Section III: Contraception Utilization**

*I am going to show you a chart of different types of birth control methods. Please point at which methods you have used in the PAST YEAR- you can point at more than one method if you have used multiple methods in the past year.*

9. Have you used any of the following methods in the past year? (select yes or no)

- |  |     |    |
|--|-----|----|
| a. Birth control pills or oral contraceptives (“the pill”) | yes | no |
| b. Male condoms  | yes | no |
| c. Injectable birth control                                | yes | no |
| d. Birth control patch (Ortho-Eva)                         | yes | no |
| e. Intrauterine devices/IUD                                | yes | no |
| f. Birth control implants                                  | yes | no |
| g. Vaginal ring (Nuva-ring)                                | yes | no |
| h. Diaphragm, sponge, female condom, foam, cream           | yes | no |
| i. Rhythm method/natural family planning                   | yes | no |
| j. Sterilization (tubal ligation or hysterectomy)          | yes | no |
| k. Emergency contraception or “morning after pill”         | yes | no |
| l. Withdrawal or “pulling out” method                      | yes | no |

10. Are you currently using any form of birth control?

- a. Yes
- b. No

11. Specify which type of birth control you are currently on?

- a. Birth control pills
- b. Injectables (Depo-Provera)
- c. Implant (Nexplanon/Implanon)
- d. IUD
- e. Vaginal ring
- f. Patch
- g. Tubal ligation (I’ve had my tubes “tied”)
- h. Condoms

*Sometimes, different methods of birth control have different costs associated with them.*

12. Has cost ever been a barrier in obtaining the birth control of your choice?

- a. Private insurance
- b. Medicaid or other public insurance (TennCare)
- c. Out-of-pocket payment
- d. No payment necessary or copayment only
- e. Not applicable (Haven’t received birth control in the past year)

13. Have you used a condom in the past 6 months?

- a. Yes
- b. No

14. What is your primary purpose for using condoms?

- a. STD prevention
- b. Pregnancy prevention
- c. Both

15. How frequently do you use condoms?

- a. Always
- b. Most of the time
- c. Sometimes

#### **Section IV: Reproductive Intent**

16. Would you like to become pregnant in the next year?

- a. Yes
- b. No
- c. Not sure
- d. Okay either way

#### **Section V: Preference for Integration**

17. Would you feel comfortable talking about birth control at The Next Door?

- a. Yes
- b. No

18. Who would you feel most comfortable talking to?

- a. Doctors
- b. Nurse Practitioners
- c. Pharmacists
- d. Nurses
- e. Therapists
- f. Case Managers

19. If we could provide you with a method of birth control of your choice before you leave, would you be interested?

- a. Yes
- b. No
- c. Not sure

20. If birth control were available at this location, and cost was not an issue, which method would you choose to use?

- a. Oral birth control pills
- b. IUS/IUS (intrauterine device)
- c. Depo-Provera shot
- d. Implant (Nexplanon)
- e. None, I do not want any form of birth control
- f. Other: \_\_\_\_\_



## Women's Health Survey

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⇒ Are you a woman between 18 and 51 years of age?

⇒ Are you interested in voicing your thoughts on birth control and women's health?

⇒ Do you want to be a part of a helpful research study?

If you answered *YES* to any of these questions, you may be eligible to participate in an interview about birth control and family planning.

The interview will take less than 10 minutes. [To thank you for your time, you will receive a candy bar at the conclusion of the interview.](#) No medications will be given.

**Where: Consult Room 2-2 (2<sup>nd</sup> floor)**