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Exploring Contraceptive Decisions of Minority Women of Reproductive Age with Serious Mental Illnesses (SMI)

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Abstract

Background

Women represent two-thirds of the cases of serious mental illness (SMI). Women with SMI are at an increased risk for negative reproductive health outcomes, including unintended pregnancy, negative pregnancy outcomes, STIs, and having coerced or transactional sex. However, they are less likely to receive sexual and reproductive health services.

Objectives

There were two objectives of this study: 1) determine which contraceptive method women with SMI choose to use (if any) and 2) what factors contribute to the consistent and correct use of contraceptives of choice.

Methods

Twelve semi-structured interviews were conducted with women of reproductive age (18-44) with a self-reported SMI at an urban safety net outpatient clinic in Atlanta, GA. Individual interviews were recorded and transcribed verbatim with participant consent. Results were organized using the Gelberg-Andersen Model for Vulnerable Populations and the Intersectionality Framework.

Results

Only eight out of twelve women were sexually active at the time of the interview, although all had a history of sexual activity. Only half of the women in this study met the recommendation for an annual well-woman exam. Women who received preventative health services were more likely to be using a contraceptive option.

Nearly half of the participants reported having at least one unintended pregnancy, two had abortions, and none reported ever having a STI. Reported barriers to contraceptive use is stable relationships (3), contraception beliefs (6), sexual trauma (5), financial costs (4), and transportation (2).

Among those who reported being sexually active, women in this population were more likely to use lesser effective methods of contraception. There were high rates of discontinuance of more effective contraceptive options.

Conclusions

There is a need for increased family planning in this population. Current contraception use in this sample was low, although most participants expressed a desire to delay pregnancy until they felt they were in a stable mental, emotional, and financial state. These finding suggest that there is a need among mental and reproductive health providers to consider the needs of women with SMIs.

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Introduction

Mental health includes emotional, psychological, social, and spiritual well-being (Centers for Disease Control and Prevention, 2013; Keyes, 1998; Ryff, 1989; Ryff & Keyes, 1995). Mental health is a state of living in which an individual can maximize her/his full potential, recognize strengths, manage stressors, and make a positive impact on society (Centers for Disease Control and Prevention, 2013; World Health Organization, 2010). There is emerging evidence that positive mental health is associated with improved health outcomes.

Conversely, mental illness is a health condition that can result in changes in thought processes, emotions/mood, and behavior. As the result of mental illness, an individual may have an impaired ability to function in society. A total of 43.5 million (18.5%) adults experience mental illness every year (National Alliance on Mental Illness, n.d.). Three-quarters of chronic mental illness begins by the age of 24 (National Alliance on Mental Illness, n.d.).

Among those who are diagnosed with a mental illness, roughly 2 million (4.2%) are classified as a serious mental illness (SMI) (National Institute of Mental Health, n.d.). A SMI can be defined as a mental illness that causes serious disruption of normal activity such as functional impairment and an inability to work or go to school (National Institute of Mental Health, n.d.). The six most common SMI categories are anxiety disorders (i.e. general anxiety disorder), mood disorders (i.e. bipolar disorder), psychotic disorders (i.e. schizoaffective disorder), eating disorders (i.e. bulimia nervosa), dementias (i.e. Alzheimer's), and personality disorders (i.e. borderline personality disorder) (National Institute of Mental Health, n.d.). SMI is estimated to cost Americans \$193 billion in lost wages per year and affects individuals of all ages (Insel, 2008). For example, suicide is the second leading cause of death for adolescents and young adults aged 15-24, with 90% of those who commit suicide having a mental health condition (National Institute of Mental Health, n.d.) Furthermore, mood disorders, such as major depression and bipolar disorder, are the third leading cause of hospitalization in the U.S. for adults aged 18–44 (Wier et al., 2011).

Individuals with SMI have a significant decrease in life expectancy due to preventable medical conditions such as an increased risk for heart disease, obesity, and addiction (Hert et al., 2011; National Survey on Drug Use and Health, 2014; Robson & Gray, 2007; Happell, Scott, & Platania-Phung, 2012; Hughes & Gray, 2009; Matevosyan, 2009; McKinnon, Cournos, & Herman, 2002; Meade & Sikkema, 2005a, 2005b; Rothbard et al., 2015). About 60% of the excess mortality is due to physical illness such as obesity, diabetes mellitus, metabolic syndrome, and myocardial infarction (Hert et al., 2011).

Women are more likely than men to have a SMI (Goodell, Druss, & Walker, 2011). Women represent two out of three cases of mental illness. Comorbid conditions, specifically for women with SMI, may be related to lower access to preventative care such as pelvic exams, pap smears, and sexually transmitted infections (STI) testing (Özcan, Boyacıoğlu, Enginkaya, Dinç, & Bilgin, 2014; Happell et al., 2012; Hughes, Bassi, Gilbody, Bland, & Martin, 2016; Hughes & Gray, 2009; Matevosyan, 2009; Matevosyan, 2010; McKinnon et al., 2002; Meade & Sikkema, 2005a; Rosenberg et al., 2001; Rothbard et al., 2015). Furthermore, women with SMIs are at an increased risk for STIs, unintended pregnancy, and negative pregnancy outcomes (Dickerson et al., 2004; Matevosyan, 2009; Matevosyan, 2010; Miller, 1997; Özcan et al., 2014; Wenzel, Leake, & Gelberg, 2000). This is due, in part, to the fact that women with SMI are more likely to have riskier sex practices, frequent partner changes, and are more likely to be victims of physical and sexual abuse when compared to the population without SMI (Meade & Sikkema, 2007; National Survey on Drug Use and Health, 2014; Randolph et al., 2007; Wiencrot, Nannini, Manning, & Kennelly, 2012).

Discussions about family planning are essential for all women of reproductive age (18-44), particularly those with SMI. Women with SMI have more adverse consequences of unintended pregnancies. Many of these can be traced back to psychotropic medications, such as those to treat bipolar disorder, that can have teratogenic potential (Yonkers et al., 2004). Pregnant women with SMI often make a precarious decision to either discontinue the use of their medication or continue and put their fetus at risk for developing a birth defect (Viguera et al., 2000).

When women with SMI interact with the health care system, it is most often through their mental health provider (Brunette, Drake, Marsh, Torrey, & Rosenberg, 2003; Druss, Von Esenwein, Compton, Zhao, & Leslie, 2011; Hert et al., 2011) Studies have pointed to the lack of communication between primary health care and mental health care providers about reproductive health topics for women with SMI (Druss & Newcomer, 2007). However, scarce data is available regarding contraceptive decisions and sexual practices for women with SMI (Matevosyan, 2009).

The Grady Outpatient Behavioral Health Center serves a predominately uninsured or underinsured minority population (Gault, 2011; Bougrab, Bracho, Ford, Girard, & Philip, 2015). Minority groups are at a higher risk of mental illness, unintended pregnancy, STIs, and lower users of contraception (Health and Human Services, 2002). To integrate health care for those with mental illness, Grady Outpatient Behavioral Health Center has adopted a medical health home model. This model includes primary care clinic housed within the same building as the mental health services. This research project aims to understand sexual and reproductive health (SRH) practices and contraceptive choices among women with SMI. This group is at-risk for negative SRH outcomes (Matevosyan, 2009). This study uses the Gelberg-Andersen Model for Vulnerable Groups to explore contraceptive decisions made by women with SMI. This evidence-based framework helps identify predisposing, enabling, and need factors that pose as barriers and facilitators for a health outcome of interest (Aday & Andersen, 1974; Andersen, 1968; Andersen, 1995; Stein et al., 2007). This model is paired with the Intersectionality Framework to contextualize the ethnic and socioeconomic identities that patients from Grady Outpatient Behavioral Health Center represent (Bowleg, 2012; Crenshaw, 1991). By understanding current contraceptive utilization among women with SMI, SRH interventions can be better tailored to meet the needs of this vulnerable group.

Research Gap

Women with SMI have an increased need for contraception and family planning services, however, they are less likely to receive access to them (Brunette et al., 2003; Druss et al., 2011; Hert et al., 2011). There is insufficient information on contraceptive practices for this population (Matevosyan, 2009). Qualitative interviews provide women with SMI the opportunity to express their views, practices, and experiences with contraception (Krueger & Casey, 2014). Additionally, these methods are better suited to understanding the cultural context and stigma faced by this group when attempting to access to SRH services. The results from this project will help inform SRH interventions at Grady Outpatient Behavioral Health Center.

Purpose Statement and Research Questions

This qualitative project was designed to examine contraceptive decisions made by women with SMI. Women with SMI tend to have poorer SRH outcomes due to inadequate family planning and failure to utilize screening services (Hall, Steinberg, & Marcus, 2014; Matevosyan, 2009; Matevosyan, 2010; Miller, 1997; Xiang, 2015). The health disparities experienced by women with SMI can contribute to the complicated relationship between gender, stigma, race/ethnicity, socioeconomic status (SES), and healthcare access (Goodell et al., 2011; Hert et al., 2011; Matevosyan, 2009). The primary research questions included the following:

- 1) Which contraceptive method(s) do women with SMI choose to use (if any), and why?
- 2) What factors contribute to the consistent and correct use of contraceptives of choice?

Information from this study will help inform SRH services and practices at Grady Outpatient Behavioral Health Center. Patient feedback will be incorporated into a comprehensive SRH curriculum. The findings of this project can have important implications for the fields of gynecology and psychiatry.

Definition of Terms

Mental Health

The phrase mental health refers to "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (Centers for Disease Control and Prevention, 2013; World Health Organization, 2010). There is emerging evidence that positive mental health is associated with improved health outcomes. Mental health includes emotional, psychological, social, and spiritual well-being (Centers for Disease Control and Prevention, 2013; Keyes, 1998; Ryff, 1989; Ryff & Keyes, 1995).

Mental Illness

Mental illness is defined as "collectively all diagnosable mental disorders" or "health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning" (Centers for Disease Control and Prevention, 2013; Chapman, Perry, & Strine, 2005; Kessler, Chiu, Demler, & Walters, 2005; Lopez & Murray, 1996).

Serious/ Severe Mental Illness (SMI)

A SMI is "a mental, behavioral, or emotional disorder (excluding developmental and substance use disorders)" that is either currently diagnosable or has been diagnosed within twelve months (National Institute of Mental Health, n.d.). The disorder must meet *Diagnostic and Statistical Manual of Mental Disorders* (DSM-V) criteria and severely limits or interferes with daily functioning (National Institute of Mental Health (National Institute of Mental Health), n.d.). SMI covers six categories including: anxiety disorders, mood disorders, psychotic disorders, eating disorders, dementias, and personality disorders. Table 1 below depicts example diagnoses by SMI category (Ford, 2016).

SMI Category	Diagnosis
Anxiety Disorders	Generalized Anxiety Disorder Phobias Panic Disorder Obsessive-Compulsive Disorder (OCD) Post-Traumatic Stress Disorder (PTSD)
Mood Disorders	Major Depressive Disorder (MDD) Bipolar Disorder (types I and II) Dysthymic Disorder
Psychotic Disorders	Schizophrenia Schizoaffective Disorder
Eating Disorders	Anorexia Nervosa Bulimia Nervosa Binge Eating Disorder
Dementias	Alzheimer's Vascular dementia Dementia due to other medical conditions
Personality disorders	Borderline Personality Disorder

Table 1. SMI Category by Diagnosis

Sexual and Reproductive Health

Sexual and reproductive health (SRH) is a term that refers to the natural functions and processes of the human reproductive system (Amnesty International, n.d.; United Nations Population Fund, 2016). It encompasses large domains of sexual satisfaction, safe sexual practices, access to affordable preventative health services such as STI testing and pap smears, access to birth control, abortion services, prenatal and postnatal care, and "the capability to reproduce, and freedom to decide if, when, and how often to do so" (United Nations Population Fund, 2016).

Family Planning Services

Family planning services are reproductive health care services that support women's decision to have children, to prevent unintended pregnancies, or provide termination options (World Health Organization, 2016). The World Health Organization recommends that family planning services are dispensed by knowledgeable and respectful health care workers that provide women with choices among a variety of contraceptive methodologies. The information given should be evidence-based information pertaining to risks and benefits of contraceptive-decisions (World Health Organization, 2016).

Women of Reproductive Age

Female adults 18-44 years of age.

Literature Review

Almost 1 in 5 American adults experience mental illness yearly (National Institute of Mental Health, n.d.). Women are disproportionately burdened by mental illness, representing 60% of all cases. Cases of SMI are less common, but those with SMI comprise an important and vulnerable subgroup. Approximately 1 and 20 Americans experience a SMI (National Alliance on Mental Illness, n.d.). Women represent approximately two-thirds of the cases of SMIs, equating to more than 15.5 million women nationwide (Goodell et al., 2011; National Institute of Mental Health, n.d.).

A SMI is defined several ways by different organizations (National Institute of Mental Health, n.d.). The main criteria are: 1) a mental, behavioral, or emotional disorder 2) the disorder can be diagnosable in the past year 3) the disorder must meet DSM-V criteria 4) the disorder must disrupt life activities and functions (National Institute of Mental Health, n.d.). Individuals with SMI suffer from large health disparities due to social, cultural, and systemic inequalities (Happell et al., 2012; Hughes & Gray, 2009; Matevosyan, 2009; McKinnon et al., 2002; Meade & Sikkema, 2005a, 2005b; Rothbard et al., 2015).

Individuals with SMI are likely to die 10-30 years before the general population, largely due to chronic disorders such as cancer and infectious diseases (Happell et al., 2012; Hert et al., 2011; Parks, Svendsen, Singer, Foti, & Mauer, 2006). It is estimated that 60% of the excess mortality is due to physical illness such as obesity, diabetes mellitus, metabolic syndrome, and myocardial infarction (Hert et al., 2011). Individuals with SMI are likely to die 10-30 years before the general population (Hert et al., 2011; Parks et al., 2006). People with SMI are at an increased risk of physical illness such as obstetric complications, sexual dysfunction, HIV, Hepatitis B and c, tuberculosis, poor dental status, and myocardial infarction (Frandsen, Joynt,

Rebitzer, & Jha, 2015; Hert et al., 2011; McKinnon et al., 2002). Cardiovascular disease is the most common cause of death in individuals with SMI. Individuals with schizophrenia and bipolar disorder are 2-3 times more likely to die from heart disease. Diabetes, hypertension, and obesity are the major factors contribute to cardiovascular disease. Antidepressants and mood stabilizers have been associated with weight gain (Hert et al., 2011). Individuals with bipolar disorder have a 1.2 to 1.5 increased chance of obese and individuals with schizophrenia have an increased likelihood of 2.8 to 3.5. In addition, individuals with SMI have an increased risk of diabetes mellitus (Hert et al., 2011). Individuals with bipolar disorder are 2-3, depression are 1.2-2.6, and schizophrenia are 4-5 more times likely to have diabetes than healthy controls (Hert et al., 2011). In addition to weight gain, medications used to treat SMI have other negative effects. Psychotropics have also been associated with diabetes mellitus, sexual dysfunction, periodontal disease, fetal malformations, and osteoporosis (Hert, 2011). Individuals with SMI need to receive adequate education about the risks associated with psychotropic medication.

Among women, SRH issues can contribute to SMI morbidity and mortality such as higher rates of female genital diseases and obstetric complications (Hert et al., 2011; Wiencrot et al., 2012). Furthermore, women with SMI are 20-30% less likely to obtain breast and cervical cancer screening when compared to people without SMI (Happell et al., 2012). Other known health risks associated with mental illness are high rates of HIV infection, STIs, risky sexual activity, sex trade, and drug use (Carey, Carey, & Kalichman, 1997; Hobkirk, Towe, Lion, & Meade, 2015; Hughes et al., 2016; McKinnon et al., 2002; Meade & Sikkema, 2005a, 2005b; Sandelowski, Lambe, & Barroso, 2004; Weinhardt, Bickham, & Carey, 1999).

Women with SMI: Unintended Pregnancy, STI Risks, and Contraception Use

In 2004-2005, it was reported that 60% of a sample of adults with SMI were sexually active (Meade & Sikkema, 2005a). Hyper sexuality is associated with positive symptoms of bipolar disorder, a common SMI (Matevosyan, 2009; Matevosyan, 2010; Miller, 1997). This results in higher numbers of sexual partners for individuals with SMI (Matevosyan, 2009). Individuals with SMI are more likely to report trading sex to fulfill basic needs such as food and shelter than the rest of the population (Weinhardt et al., 1999). In a sample of individuals with SMI, approximately 14% reported trading sex for money, drugs, or shelter within the past year (Meade & Sikkema, 2005a). This can place women with SMI at an increased risk of negative SRH outcomes, such as those associated with STIs or unintended pregnancy (Guttmacher Institute, 2015; Santelli et al., 2003; Takahashi et al., 2012).

Unintended Pregnancy

Guttmacher Institute, (2015) reports that approximately 50% of all US pregnancies are unplanned, mistimed, or unwanted. The unintended pregnancy rate in the United States the highest among industrialized countries (Gauthreaux et al., 2017). The Pregnancy Risk Assessment Monitoring System (PRAMS) is a population-based surveillance system ran by the Centers for Disease Control and Prevention. A secondary analysis of pregnancy intention data from 2009—2011 (n=110,231) revealed a positive relationship between mistimed or unintended pregnancy and postpartum depression (PDD) (Gauthreaux et al., 2017). Women with a mistimed pregnancy that was desired later or unwanted had a 30% (AOR= 1.3; 95% CI: 1.2-1.4) and 50% (AOR= 1.5; 95% CI: 1.3-1.7) chance of experiencing symptoms of PPD. Other factors were associated with women experiencing PDD were having a previous history of depression (AOR= 1.8; 95% CI: 2.5-4.0) and being abused during or before pregnancy (AOR= 1.6; 95% CI: 1.4-2:0) (Gauthreaux et al., 2017). These findings have important implications for US women with SMI who experience an unintended pregnancy, because women with bipolar disorder are more likely than men experience depressive episodes (Altshuler et al., 2010; Miller et al., 2015; Nivoli et al., 2011).

There are other risk factors of unintended pregnancy for women with SMI. Unintended pregnancy trends in the US are rising among poor women, while it is decreasing among wealthy women (Guttmacher Institute, 2015). The rate of unintended pregnancy among poor women was five times that of those living above 200% of the federal poverty line. Due to the severity of their mental illness, women with SMI are more likely to be unemployed (National Institute of Mental Health, n.d.). Further concerns surrounding an unplanned pregnancy are that women are more likely to be/become victims of domestic violence (Gazmararian et al., 1995).

There are additional considerations for women with SMI who experience unintended pregnancies. First, psychotropic medications, such as those used to treat bipolar disorder, have teratogenic potential to harm developing fetuses (Yonkers et al., 2004). This places women with SMI at a greater risk of having children with birth defects. In addition, infants can be exposed to harmful medication via breastmilk (Freeman & Gelenberg, 2005). Women with SMI must make a precarious decision to either discontinue the use of their mood stabilizer or continue and put their fetus at risk (Viguera et al., 2000). Sometimes, women choose the former without consulting their psychiatrist which puts them at an additional risk of a mental health relapse during their pregnancy (Viguera et al., 2000). Second, women with SMI have higher rates of negative obstetric and neonatal outcomes such as preterm birth, low birth weight, stillbirth, and obstetric complications (Alder, Fink, Bitzer, Hösli, & Holzgreve, 2007; Grote et al., 2010; Kelly

et al., 2002). Third, women with SMI report difficulties parenting as a result of their symptoms and financial burdens (Howard, Kumar, & Thornicroft, 2001).

STI Risks

Worldwide, the World Health Organization, (2015) has estimated that one million new cases of STIs are acquired each day. STIs are particularly concerning for adults with SMI (McKinnon et al., 2002; Meade & Sikkema, 2005a; Randolph et al., 2007; Rosenberg et al., 2001). Hughes, et. al., (2016) conducted a meta-analysis of 91 articles related to HIV, Hepatitis B, and Hepatitis C of men and women with SMI. The prevalence of HIV was 6% vs. 0.6%, Hepatitis B 2.2% vs. 1.5%, and Hepatitis C 17.4% vs. 1% among individuals with SMI compared to the general US population (Hughes et al., 2016).

Research suggests that HIV risk varies by SMI diagnosis (Cournos et al., 1994; McKinnon et al., 2002; McKinnon, Cournos, Sugden, & Herman, 1996; Meade & Sikkema, 2005a). For example, positive psychiatric symptoms such as hallucinations, delusions, and racing thoughts are associated with an increase risk in sexual behaviors. Overall, low voluntary testing rates among people with SMI make it difficult to estimate the prevalence of STIs such as chlamydia, gonorrhea, and human papilloma virus (HPV) (Meade & Sikkema, 2005b).

In a meta-analysis of 52 studies, Mead & Sikkema, (2005a) found that factors associated with STIs among all adults with SMIs are homelessness, sex trade, multiple sex partners, and frequent unprotected sex (Meade & Sikkema, 2005a). Specifically, almost 50% of individuals with SMI reported multiple partners and never using a condom in the past year; about 33% reported at least one STD in their lifetime; and about 25% reported participating in sex trade at some point. While only 4% had injected drugs over the past year, among drug users, 50% reported sharing needles (Meade & Sikkema, 2005a). Unfortunately, it has been found that only

55% of sexually active people with SMI get the recommended testing for HIV (Meade & Sikkema, 2005b).

In general, STIs have many health implications for reproductive aged women. Among the top STI concerns are infertility, pelvic inflammatory disease and polycystic ovary syndrome (Centers for Disease Control and Prevention, 2015). When compared to the general population, women with SMI are more vulnerable to acquiring a STI due to increased rates of coerced or transactional sex, homelessness, unstable interpersonal relationships, violence, sexual partners, childhood sexual abuse, substance abuse, and cognitive-behavioral factors (Carey et al., 2004; Coverdale, Bayer, McCullough, & Chervenak, 1995; Matevosyan, 2009; McKinnon et al., 2002; Meade & Sikkema, 2005a; Miller, 1997; Weinhardt et al., 1999). The problem is exacerbated by the fact that there are not many female-controlled methods to prevent STIs (Coverdale et al., 1995).

There are several barriers to STI testing and treatment for women with SMI. One barrier to STI testing can be the intrusive vaginal exam, which can trigger traumatic memories for women with trauma histories and/or severe PTSD (Xiang, 2015). Other concerns are stigma, fear of a positive result, low perception of risk, lack of accurate STI information, and an absence of symptoms (Carey et al., 2004; Centers for Disease Control and Prevention, 2004). These concerns are similar for women with SMI at the Grady Outpatient Behavioral Health Center (Bougrab, Bracho, Ford, Girard, & Philip, 2015). As for STI treatment, there are issues with follow-up and non-adherence to treatment guidelines (particularly for HIV/AIDS) that are related to impaired cognitive-function of individuals with SMI (New York State Department of Health AIDS Institute, n.d.; Bangsberg et al., 2001; Velligan et al., 2010).

STI interventions are critical for reproductive-aged women with SMI. The consequences of an STI infection include vertical transmission of disease, cervical cancer, and the spread of drug-resistant bacteria (World Health Organization, 2015). Successful sexual health interventions have provided education on increasing condom use and have shown a decrease in the number of sexual partners for women with SMI (Senn & Carey, 2009). Mental health providers have been advised to screen high-risk patients for HIV and hepatitis to increase testing rates among this population (Happell et al., 2012).

Contraceptive Use

The Centers for Disease Control and Prevention characterizes effective contraceptive use by typical failure rates (Farr, Curtis, Robbins, Zapata, & Dietz, 2011). Methods with high effectiveness result in pregnancy less than 10% of time with typical use. The most effective methods are long-acting contraceptives (LARCs), male and female sterilization, short-acting contraceptives (SARCs), and the ring and the patch. Moderately effective methods of contraception were condoms. Less effective, reversible methods include female condoms, diaphragm, cervical cap, sponge, rhythm method, and withdrawal. Emergency contraception is not considered a form of birth control, but an option for pregnancy prevention when contraceptive failure is suspected (Centers for Disease Control and Prevention, n.d.). The rates of emergency contraception use in 2006–2010 among this population is approximately one in nine or 11% of women, a 6.8% increase from 2002 (Daniels, Jones, & Abma, 2013). Among emergency contraceptive users, 41% have used the method two or more times. **Figure 1** depicts the effectiveness of popular birth control options from highest to lowest effectiveness.

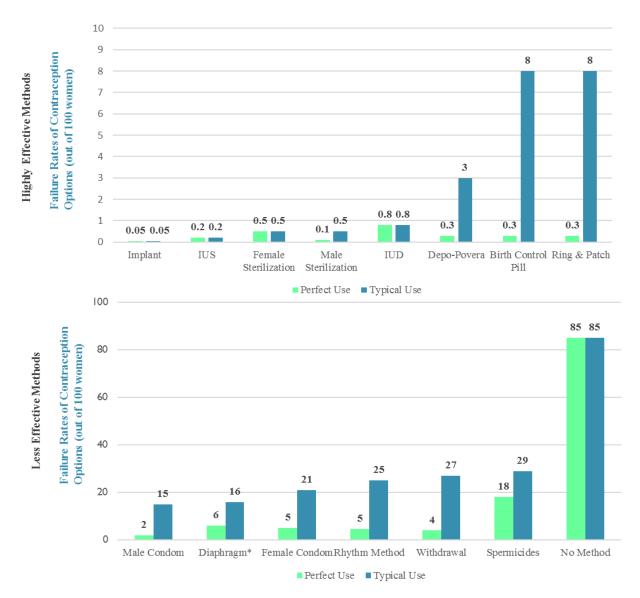


Figure 1. Contraception Method by Typical Use Effectiveness

The National Health Statistics report states that between 2011 - 2013, 62% (n=3473) of women ages 15 - 44 were using contraception (Daniels, Daugherty, Jones, & Mosher, 2015). The sample was randomly selected to be generalizable to the US population. Nearly 20% of the women were not using contraception because they are not having sex or never had sex at the time of the interview. Among "current users" in Daniels, (2015) only 22.1% were using lesser effective methods. **Figure 2** gives the breakdown of current US users.

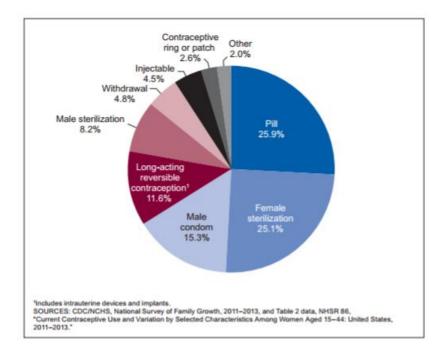


Figure 2. United States Contraceptive Utilization by Method

There is limited data on the rates of contraceptive use in women with SMI (Faisal-Cury, Menezes, & Huang, 2013; Matevosyan, 2009). In a meta-analysis of 85 studies, Matevosyan, (2009) found that fifteen articles from 1971—2008 discussed contraceptive use among women with SMI. These articles stated that women with SMI were less likely to use contraception than the general population. The same trend has been explored in more recent articles. Women with SMI are, on average, less likely to use contraception (Hall, Moreau, Trussell, & Barber, 2013a, 2013b; Hall, Steinberg, et al., 2014; Hall, White, Rickert, Reame, & Westhoff, 2012). If a contraceptive method is chosen, it is more likely to be less effective. A study of 136 women with bipolar disorder in Brazil found that only 58.8% were using contraception [tubal ligation (16.3%), oral contraceptives (16.2%), condoms (12.8%), intrauterine contraception (4.4%), and partner vasectomy (2.8%)] (da Silva Magalhães, Kapczinski, & Kauer-Sant'Anna, 2009).

Long-Acting Reversible Contraceptives

Long-acting reversible contraceptives (LARCs) are one of the most effective forms of modern pregnancy prevention (Centers for Disease Control and Prevention, n.d.). LARCs have efficacy rates that average between three—five years (Hatcher, Zieman, & Cwiak, 2004). They come in three forms: the intrauterine device (IUD), intrauterine system (IUS), and the implant (Implanon®) (Hatcher et al., 2004). LARCs also have the benefit of allowing women to have returned fertility immediately after removal. A study using national insurance claims in the United States from 2001-2006 evaluated 849 women with bipolar disorder and the use of longacting contraceptive methods (Berenson, Asem, Tan, & Wilkinson, 2011). The authors found that female sterilization (48.4%) was the highest form of long-acting methods, IUDs were the second-choice method, (29.9%; 16.5% LNG, 13.4% Copper T) followed by Depo Provera® (21.6%) (Berenson et al., 2011). One criticism of advocating for LARC methods or sterilization among women with SMI is that these methods are associated with higher rates of discontinuance of barrier methods (Curtis, 2016; Hatcher et al., 2004). This is a concern because women with SMI are at an increased risk for STI infection due to risker sexual practices (Carey et al., 2004; Coverdale et al., 1995; Matevosyan, 2009; McKinnon et al., 2002; Meade & Sikkema, 2005a; Miller, 1997; Weinhardt et al., 1999).

Sterilization

Tubal ligation (sterilization) of a woman has one of the highest effectiveness against unintended pregnancy with a perfect-use failure rate of 0.5% (Centers for Disease Control and Prevention, n.d.). However, these methods are permanent and are not recommended for individuals who still want to have children (Curtis, 2016). Women with SMI who choose sterilization are often older than those choosing the reversible contraceptive options (Berenson et al., 2011).

Practitioners have raised questions about the ethics surrounding consent of sterilization and abortion for women living with mental illnesses (Pollack, 2005). It is argued that some individuals living with SMI are unable to consent to permanent or life-altering procedures. There are important ethical and financial implications of this decision for providers to make clear to patients. Federal Medicaid requirements for a sterilization include: the individual being over 21 years of age, mentally competent, signed consent form from patient and physician indicating giving or receiving comprehensive contraceptive counseling, and the sterilization is performed between 31 to 180 days after signing the form. If an interpreter is necessary for the woman to understand their contraceptive options, then they, too must sign a form (*42 CFR § 441.258*).

Some states reserve the right to limit or reduce the amount of sterilizations that they cover with their Medicaid funding (Walls, Gifford, Ranji, Salganicoff, & Gomez, 2016). The State of Georgia Medicaid Coverage follows the strict federal government guidelines for sterilization payment with Medicaid. This could be the result of Georgia's participation in the Eugenics movement of the mid-1900s (Harper, 1983; Larson, 1996). It is reported that Georgia had the 5th highest number of forcible sterilizations totaling over 3,000 individuals between 1937 and 1963 (Paul, 1965). Unlike other areas of the country who selected victims for sterilization largely based on race, Georgia limited their sterilizations to those deemed "mentally unfit" to reproduce (Larson, 1996; Paul, 1965). Over 75% of forced sterilizations in Georgia were among those living with a mental illness. The remainder of sterilizations were among criminals or sex workers (Larson, 1996). The goal of the Eugenics movement was to protect the genetic integrity

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of future generations. The sterilization law of 1937 was finally overturned in 1970 in Georgia (Harper, 1983). However, nationwide mistrust of the US health care system has persisted.

Short-Acting Reversible Contraceptives

A short-acting contraceptive method is Depo Provera®, or injectable contraception. It has extremely high rates of efficacy (Centers for Disease Control and Prevention, n.d.; Farr et al., 2011; Hatcher et al., 2004). It also has one of the lowest levels of usage (4.5%) and twelvemonth continuation rates (50%) in the United States (Berenson et al., 2011; Centers for Disease Control and Prevention, 2011; Draper et al., 2006; Hatcher et al., 2004; Hubacher, Goco, Gonzalez, & Taylor, 1999; C. Paul, Skegg, & Williams, 1997; Vaughan, Trussell, Kost, Singh, & Jones, 2008). One of the most commonly cited reasons are the quarterly physician visits (Hatcher et al., 2004). Among women with SMI, Berenson, (2011) found that only 31% of users of injectable contraception completed four visits within a year. Comparatively, 80% of SMI users of IUDs continued their method through the study period. The authors conclude that IUDs or IUSs might be a more convenient option for women with SMI due to the ease and effectiveness of the methodology (Berenson et al., 2011).

Birth Control Pills

Regular and proper use of oral contraceptives can prevent pregnancy in 91-94% of the time (Centers for Disease Control and Prevention, n.d.). This effectiveness is comparable to that of using the contraceptive patch and/or the ring. In addition, birth control pills are the most common option among American women. However, oral contraceptives may not be the best option for women with SMI due to possible mood side effects (Hall et al., 2012). In a study of 354 young women ages 13-24, only 38% continued using oral contraception at 6 months (Hall et

al., 2012). Depressed mood, stress, and perceived weight change all increased the probability of discontinuing oral contraception use. These side effects were felt the most by young women who had higher levels of depressed mood and stress at baseline. This indicates that hormonal contraceptives might exacerbate mood changes among women with SMI (Hall et al., 2012). There is evidence that oral birth control pills can have interactions with psychiatric medications (Centers for Disease Control and Prevention, 2011; Crawford, 2002; Dutton & Foldvary-Schaefer, 2008; Gaffield, Culwell, & Lee, 2011; Hall, Steinberg, et al., 2014). Other birth control options with comparable levels of effectiveness are the Ortho Evra® patch (9%), the NuvaRing® (9%) and diaphragm (12%) (Centers for Disease Control and Prevention, n.d.). These options may be better-suited to match the needs of women with SMI (Hall, Kusunoki, Gatny, & Barber, 2014).

Condoms

Out of all contraceptive methods, male and female condoms are the only options that are recommended to provide protection against STIs, in addition to pregnancy prevention (Walsh, Fielder, Carey, & Carey, 2014). However, there are issues concerning consistent and correct barrier-protection methods. Condoms have a typical use failure rate of 18% for male condoms and 21% for female condoms (Centers for Disease Control and Prevention, n.d.). In da Silva Magalhaes et al., (2009), condom usage was not prevalent among individuals with SMI. Similarly, Meade & Sikkema, (2005a) found that 54% of adults with SMI used condoms and only 17% of people with SMI used them consistently in the past year. It is recommended to use condoms to prevent STIs and an additional contraceptive method if pregnancy prevention is desired (Walsh et al., 2014).

Barriers to condom use can include lack of access to condoms or partner unwillingness (Hall, Steinberg, et al., 2014). Contraceptive counseling should also consider and acknowledge women with SMI concerns about partners being unsupportive of the use of contraception, for example condom use among heterosexual couples (Hall, Steinberg, et al., 2014). Interventions that allow women to develop and practice condom negotiation skills have been more successful than demonstrations on consistent condom use. The former strategy allows women to practice assertiveness which is particularly helpful in situations where there is a power-imbalance (Hall, Steinberg, et al., 2014; Hobkirk et al., 2015).

Other Contraceptive Methods

The least effective methods of contraception are withdrawal (22%), fertility awarenessbased methods (24%), sponge (24%), and spermicide (28%) (Centers for Disease Control and Prevention, n.d.). Without appropriate SRH services, women with SMI might revert to some of these options as a primary method of birth control and prevention (Curtis, 2016).

Due to aforementioned reasons, women with SMI need to be made aware of the full spectrum of contraceptive options to make an informed decision. Low health literacy among women with SMI can impact how this population understands health information and how to utilize prescribed medications (such as contraception) appropriately (Yee & Simon, 2014). Clear, concise, and colloquial information needs to be given to women with SMI when they are making contraceptive decisions (Yee & Simon, 2014). Checks for comprehension and follow-up are important tools to use when providing family planning counseling with this population (Druss & Newcomer, 2007; Maj, 2009)

Fragmentation of the US Health Care System

In 2014, approximately 65.8% of adults with SMI received mental health treatment (Han et al., 2015). When women with SMI interact with the health care system, it is most likely through their mental health provider (Brunette et al., 2003; Druss et al., 2011; Hert et al., 2011). Psychiatrists are an important intervention point to provide SRH education and services. Unfortunately, not all individuals suffering from mental illness are accessing mental health care (Health and Human Services, 2002). In 2008-2012, utilization of mental health service among adults varied by race and gender (National Alliance on Mental Illness, 2015). Approximately, 61.4% of mental health services were utilized by women and Caucasian women were twice as likely to access mental health services as African-American and Hispanic-American women, and three times more likely than Asian-American women in the past year (Han et al., 2015; National Alliance on Mental Illness, 2015). When minority groups access mental health care, it is often poorer quality than that of Caucasians (Health and Human Services, 2002).

A complex set of factors contribute to the health disparities experienced by women with SMI (Druss & Bornemann, 2010; Health and Human Services, 2002). It has been debated if individuals with SMI truly have access to health care services (Lawrence & Kisely, 2010). Health care access is the ability to obtain primary, secondary, and tertiary care free of restriction (Donabedian, 1972; Lawrence & Kisely, 2010). Unfortunately, there are many cultural and systematic barriers to care for women with SMI in the United States including: financial, geographical, mental/emotional, societal stigma, and educational (Donabedian, 1972). In addition, there is a distinction between health care service initiation and continuation for preventative services or treatment of chronic conditions (Donabedian, 1972). As a result, women with SMI access primary prevention services at lower rates (Happell et al., 2012; Hughes et al.,

2016; Hughes & Gray, 2009; Matevosyan, 2009; McKinnon et al., 2002; Meade & Sikkema, 2005a; Rosenberg et al., 2001; Rothbard et al., 2015). Lack of referrals, quality of health care, poorer quality of health care, and low follow-up rates from providers have been cited as common reasons for health inequity experienced by individuals with SMI (Druss, 2006; Maj, 2009; Meade & Sikkema, 2005a).

Improvements to the health care system are estimated to reduce 10% of premature mortality for individuals with SMI (Druss & Bornemann, 2010). Studies have pointed to the lack of communication between primary health care and mental health care providers about reproductive health topics for women with SMI (Druss & Newcomer, 2007). This fragmentation of health care is not uncommon in the decentralized US system. However, there is not a standard measure for health care fragmentation making it difficult to define and measure (Druss & Newcomer, 2007; Stulberg, Dahlquist, Jarosch, & Lindau, 2016). One measure of fragmentation is whether patients are sent to two or more clinics or facilities for a single episode of illness (Stulberg et al., 2016). At the Grady Outpatient Behavioral Health Clinic, a majority of the patients are uninsured so the services are provided at little to no cost (Ford, 2016). However, when women have to be referred to a gynecologist within the Grady system, there is usually an appointment set at a later date and a copay associated with the visit (Ford, 2016). As a result, many patients neglect health concerns until action is necessary (Borba et al., 2012).

Health care fragmentation can have negative impacts on women living with mental illness for a variety of reasons (Druss & Newcomer, 2007; Hert et al., 2011; Parks et al., 2006). **Figure 3** depicts how the US Health Care environment can lead to a cycle of emergency room use for women with SMI (Martha Ward, 2015). First, the separation of mental and physical health education in medical school education can leave mental health providers ill equipped to handle SRH issues and primary care or gynecologists ill trained in trauma-informed care (Agénor & Collins, 2013; Philip, 2016; Robohm & Buttenheim, 1997). Referrals to providers who are not culturally sensitive to the needs of women with SMI and can accidentally traumatize (or re-traumatize) patients (Robohm & Buttenheim, 1997). Women with SMI in a qualitative study reported that physicians dismissed some medical complaints from women with SMI because they felt they were fabricated or related to their mental illness (Borba et al., 2012). This dismissal can lead to underuse of primary care services. Second, finances or lack of knowledge about the range of services their insurance plan covers can prevent women with SMI from accessing preventative medicine services (Matevosyan, 2010). Third, symptoms of SMI such as mental health symptoms that affect the cognitive functioning of women with SMI can impair them from successfully navigating a complicated health system (Borba et al., 2012; Lawrence & Kisely, 2010; Ostrow, Manderscheid, & Mojtabai, 2014). This is compounded by the fact that some women with SMI have lower health literacy (Clausen, Watanabe-Galloway, Baerentzen, & Britigan, 2016; Sheridan et al., 2011; Yee & Simon, 2014). It has been shown that individuals with low health literacy have more difficulty understanding how to navigate the healthcare system (Ostrow et al., 2014).

Matevosyan, (2010) explored the cycle of poor health utilization for women with SMI in a mixed-method study of 44 women in an outpatient clinic with DSM-IV axis-I disorders. The author found that approximately 59% of the women did not know that their insurance or current plan covered sexual health services and contraception, 22.8% did not know the effects of psychotropic medications on their reproductive health, and 86.3% had never discussed SRH with their provider (Matevosyan, 2010). See **Figure 3** for the impact fragmentation can have on women with SMI.

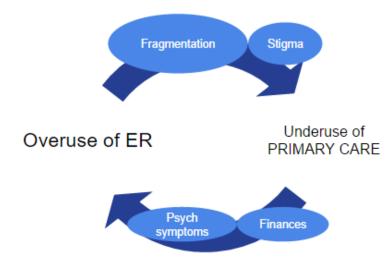


Figure 3. Factors influencing the lack of preventative care for people living with SMI

Druss and Newcomer, (2007) cite four main areas of separation between mental and medical health for patients with SMI: 1) geographic, 2) financial, 3) organization, and 4) cultural. Geographic separation refers to the physical distance between mental health and primary health services. The integration of HIV testing and counseling at an outpatient clinic increased HIV screening rates among individuals with mental illnesses (Rosenberg et al., 2004). The co-location of these services reduces costs associated with transportation and time faced by patients with SMI. Financial separation refers to the different revenue mechanisms that often fund mental health and medical programs which can have competing agendas. Organizational separation refers to the challenges faced when sharing information, records, and expertise across the health centers. Cultural separation refers to a provider's under-utilization of a holistic approach. There is a focus on the symptoms and not the underlying issues contributing to the disease. As a result, patients with SMI are more likely to overuse emergency rooms to seek primary care (Druss, 2007; Hackman et al., 2006).

Theoretical Frameworks

This study uses two public health frameworks. First, the Gelberg-Andersen Model for Vulnerable Groups was selected to explore environmental factors that can contribute to a woman with SMI's contraception decision-making process (Aday & Andersen, 1974; Andersen, 1968; Andersen, 1995; Stein, Andersen, & Gelberg, 2007). The second framework, the Intersectionality Framework, was chosen after examining demographic data of Grady Outpatient Behavioral Health Center. A vast majority of patients treated at the safety-net clinic are of African-American descent (Bougrab et al., 2015). The Intersectionality Framework takes accounts for the nuanced experiences felt by this group (Crenshaw, 1991). The female minority experience living with SMI could distinctively different than other groups with SMI.

The Behavioral Model of Health Services Use for Vulnerable Populations

The Behavioral Model of Health Services Use, often referred to as the Andersen Model, was developed in the 1960s to predict and explain patterns of health care utilization among vulnerable populations (Aday & Andersen, 1974; Andersen, 1968; Andersen, 1995; Stein et al., 2007). The model is an integrated framework that evaluates the relationship between health policy, characteristics of health delivery, utilization of health services, characteristics of the population at risk, and consumer satisfaction. Andersen argues that health care access goes beyond having a health clinic or facility in the community. There are other economic, cultural, and environmental issues that can impede an individual's ability to adequate health care.

The model includes several components that are facilitators to health care utilization such as predisposing, enabling, and need factors for a health outcome of interest. The model has been expanded to The Gelberg-Andersen Behavioral Model of Health Services Use for Vulnerable Populations to include factors that can influence marginalized groups (Stein et. al., 2007). The expanded model includes traditional and vulnerable domains. The traditional domains focus on factors that affect all populations such as age and SES whereas the vulnerable domains hone in on social issues that specifically affect disenfranchised groups such as chronic homelessness. **Figure 4** describes how this model has been adapted to fit the needs of reproductive aged women with SMI in Atlanta, GA.

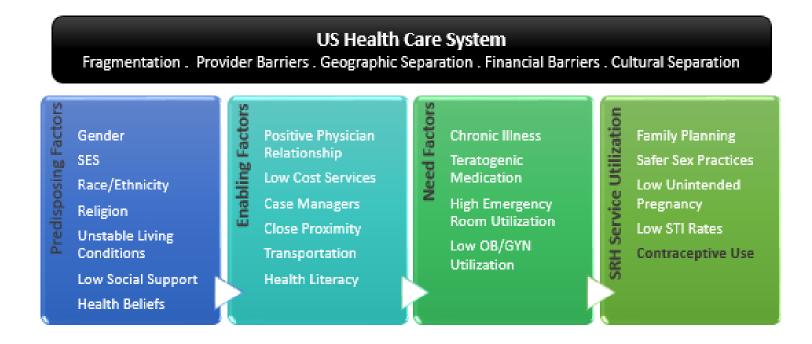


Figure 4. Modification of the Behavioral Model of Health Services Use for Vulnerable Populations

Predisposing Factors for Contraception Among Women with SMI

Predisposing factors are conditions or traits that can interfere with an individual's ability to utilize the health care system (Stein et al., 2007). There are three categories of predisposing characteristics: demographic, social structure, and health beliefs.

Predisposing demographic factors for women with SMI are age, gender, marital status, and substance abuse (Stein et al., 2007). Being a woman with a SMI can put an individual in a vulnerable position in relationships (Meade & Sikkema, 2005a). Women with SMI are twice as likely as women without SMI to report being victims of violence and are more likely to have coerced sex when compared to men with SMI (McKinnon et al., 2002; Meade & Sikkema, 2005a; Miller, 1997; Weinhardt et al., 1999). In addition, women with SMI are more likely than the general population to be unmarried which has important social implications for contraceptive use, family structure, and social support (Matevosyan, 2009). Other important demographic factors to note are individuals with a SMI diagnosis and substance use disorder. This comorbidity of disease combined with demographic factors can significantly impacts health-seeking behavior and treatment among individuals with SMI (Druss, Bradford, Rosenheck, Radford, & Krumholz, 2001; Matevosyan, 2009; McKinnon et al., 2002).

The social structure for vulnerable groups that can impact health outcomes are the domains of race/ethnicity, religion, education, occupation, and social networks (Stein et al., 2007). For example, it has been found that strong support systems are associated with less HIV risk behaviors such as lower numbers of partners and fewer unsafe sexual practices (Meade & Sikkema, 2007; Randolph et al., 2007). Unfortunately, individuals with SMI tend to have smaller social networks which can negatively impact health (Robson & Gray, 2007). The social structure component of the model has been expanded to include other factors affecting this vulnerable

group such as acute or chronic homelessness, living conditions, criminal record, and immobility that disproportionately affect individuals with SMI (Health and Human Services, 2002; National Survey on Drug Use and Health, 2014; Robson & Gray, 2007)

Finally, health belief are attitudes, values, and knowledge that can impact perceived severity or need for health services. In a mixed-method study of 44 women in an outpatient clinic with DSM-V Axis-I disorders, sexual satisfaction and pleasure were negatively impacted by past sexual abuse and long-term abstinence, especially among those with PTSD and Depression (Matevosyan, 2010). Invasive preventative health procedures such as the pap smear can unintentionally trigger sexual abuse experiences (Borba et al., 2012). This can cause women with SMI to mistrust the health care system and lead to underuse of primary care services.

Enabling Factors for Contraception Among Women with SMI

Under this model, enabling factors are resources that allow individuals to seek care whenever needed (Stein et al., 2007). Enabling factors for women with SMI to receive SRH care include: referral from a trusted physician (i.e. psychiatrists), physicians that are sensitive to the needs of this population, little to no cost services, physician follow-up, case managers to help navigate the health system, and geographical proximity to mental health services (Druss, 2006; Ford, 2016).

Need Factors for Contraception Among Women with SMI

Women with SMI are at an increased risk for negative SRH health outcomes and are less likely to receive critical SRH services from a gynecologist provider (Brunette et al., 2003; Druss et al., 2011; Hert et al., 2011). Women with SMI receive pelvic exams, pap smears, and STI testing less frequently than the general population (Özcan et al., 2014). In addition, women with SMI are more likely to be victims of physical and sexual abuse, have increased rates of unwanted pregnancy, and more likely to experience stillbirth (Dickerson et al., 2004; Matevosyan, 2009; Matevosyan, 2010; Miller, 1997; Özcan et al., 2014; Wenzel et al., 2000). Other known sexual health risks associated with mental illness are high rates of HIV infection, STIs, sexual activity, and drug use in people living with SMI (Dickerson et al., 2004; Hariri, Karadag, Gokalp, & Aksoy, 2009; Matevosyan, 2009; McKinnon et al., 2002). Limited data on contraceptive use in this population states that women with SMI lower rates of contraceptive use and higher risk to have a child with a birth defect due to popular medications used to manage their mental illness (Faisal-Cury et al., 2013; Matevosyan, 2009; Yonkers et al., 2004)

Mental Health Provider Barriers

Often, the only health services that patients with SMI regularly seek are mental health services (Brunette et al., 2003; Druss et al., 2011; Hert et al., 2011; Robinson, 2012). Psychiatrists are like to be the only physician or health educator that women with SMI of reproductive age encounter. Mental health care providers are in a unique position to impact SRH services for this vulnerable population (Philip, 2016). Women with SMI that have built a positive relationship with their mental healthcare provider are more likely to act on their referral to another physician (Borba et al., 2012). Recently, the American Psychological Association, researchers, and psychiatrists are advocating for the inclusion of SRH into the standard of practice, including discussions around contraception and family planning (Hert et al., 2011; McKinnon et al., 2002; Miller, 1997; Robinson, 2012; Robson & Gray, 2007).

Unfortunately, psychiatrists report that lack of SRH-specific training, addressing competing priorities in appointment, and physician discomfort as barriers that impact SRH conversations with female patients of reproductive age (Agénor & Collins, 2013; Philip, 2016).

Some psychiatrists feel that it is not within their scope of practice to discuss reproductive health choices and negative sexual consequences, such as HIV/AIDS, with their patients (Agénor & Collins, 2013; Philip, 2016). Instead, psychiatrists often default to traditional symptom management, social adjustments and functioning, and addressing socioeconomic concerns (Agénor & Collins, 2013). Furthermore, in severe cases of mental illness, SRH discussions take less priority (Agénor & Collins, 2013; Philip, 2016). Psychiatrists often focus on specific domains which include symptom management, socioeconomic priorities, and overall functioning, to the exclusion of SRH topics (Agénor & Collins, 2013).

In a national survey of training directors, approximately 17% of psychiatry residency programs reported that they do not have sexual health in their curriculum (Sansone & Wiederman, 2000). Others have at least one class or a seminar dedicated to SRH topics. In a web-based study of 23 residents, 43.47% (n=10) reported that they had "none" or "too little" training in SRH topics (Waineo, Arfken, & Morreale, 2010). Almost 50% indicated that they wanted more SRH training. SRH training has the ability to "provide more holistic patient-centered care, and ultimately reduce adverse sexual health outcomes in their practice settings" (Ford, Barnes, Rompalo, & Hook III, 2013).

The Centers for Disease Control and Prevention created a guide to taking a sexual history for physicians in 2005 that can be used to close this gap (Centers for Disease Control and Prevention, 2005). The guide acknowledges physician and patient discomfort around the topic of sex and provides sample questions and discussion topics for physicians to customize in their own practice. The guide focuses on the five "P"s: 1) partners 2) practices 3) protection of STDs 4) past history of STDs 5) prevention of pregnancy. A sample question about contraception is, "are you using contraception or practicing any form of birth control?" (Centers for Disease Control and Prevention, 2005). This tool can help address gaps in SRH training.

Health Outcome: Contraception Utilization

The above domains cover the issues that contribute to negative reproductive health outcomes for women with SMI. Women with SMI are at higher risks for unintended pregnancy and STIs and less likely to be using a form of effective contraception (Borba et al., 2012; Carey et al., 2004; Centers for Disease Control and Prevention, n.d.; Hariri et al., 2009; Meade & Sikkema, 2005a; Senn & Carey, 2009; Takahashi et al., 2012; Wier et al., 2011). Common issues include: provider barriers, symptoms associated with SMI such as disordered thought and hyper sexuality, difficulty to navigate US healthcare system, lack of care coordination, modifiable lifestyle factors, and financial barriers (Cournos et al., 1994; Druss, 2006; Druss & Bornemann, 2010; Druss et al., 2001; Druss et al., 2011; Hariri et al., 2009; Kamb et al., 1998; Meade & Sikkema, 2007; Philip, 2016; Rietmeijer, 2007).

Intersectionality Framework

The Intersectionality Framework was developed in the late 1980's by Kimberle Crenshaw (Bowleg, 2012; Crenshaw, 1991). The concept was derived to criticize the rejection of black feminists from the larger women's rights movement. The framework challenges the idea that all marginalized groups have the same experience (Bowleg, 2012; Crenshaw, 1991). For example, the black female experience is different than the white female experience. Intersectionality is a concept that "social categories (e.g. race, SES, gender, sexual orientation) are not independent and unidimensional but rather multiple, interdependent, and mutually constitutive" (Bowleg, 2012). Intersectionality focuses on historically oppressed and marginalized populations (Bowleg, 2012). Under the Intersectionality Framework, for every minority group that an individual represents, there is the added likelihood of health inequity. The Grady Outpatient Behavioral Health Center serves a predominately uninsured or underinsured minority population (Gault, 2011). Minority groups are at a higher risk of mental illness and less likely to access mental health care when compared to whites (Health and Human Services, 2002). The patient population of interest at Grady Outpatient Behavioral Health Center are suffering under a quadruple-burden of disease by being female, having a SMI, little to low resources, and are likely to be a part of a minority group. Hughes, et. al., (2016) believe that the increased risk of STI infections such as HIV, might not be due to only a diagnosis with SMI. Other factors such as SES status, drug abuse, sex, minority status confound the association.

In addition, people with SMI report that perceived stigma and discrimination negatively affect their motivation and ability to access medical care (Borba et al., 2012; Lawrence & Kisely, 2010; Ostrow et al., 2014). In a study of 1670 individuals with SMI, 28% of the participants reported having difficulty in accessing medical care (Ostrow et al., 2014). Among this group, 45% stated that their difficulties are due to stigma surrounding mental health issues (Ostrow et al., 2014). The inclusion of the Intersectionality Framework as a guiding model will provide a more accurate account of the experiences of female patients at Grady Outpatient Behavioral Health Center.

Methods

This qualitative research project is a part of a larger mixed-method initiative to improve SRH care for adult women of reproductive age living with SMI in Atlanta, GA. The Emory faculty leading the project are Drs. Silke von Esenwein, Martha Ward, and Sarah Cook. Project components are demonstrated in **Figure 3**. The quantitative electronic medical chart review has provided insight into patient demographics at Grady Outpatient Behavioral Health Center. The quantitative survey and qualitative interviews have been conducted with psychiatric residents and attending physicians from both Emory School of Medicine and Morehouse School of Medicine working at the Grady Outpatient Behavioral Health Center to provide insight into psychiatrists' perceived barriers and facilitators to SRH services for their adult female patients. The current project focused solely on the qualitative interviews designed to examine patient perspectives regarding contraceptive access and utilization (highlighted in purple in **Figure 3**).

Research Program

Sexual and Reproductive Health Care and Services for Adult Women of Reproductive Age

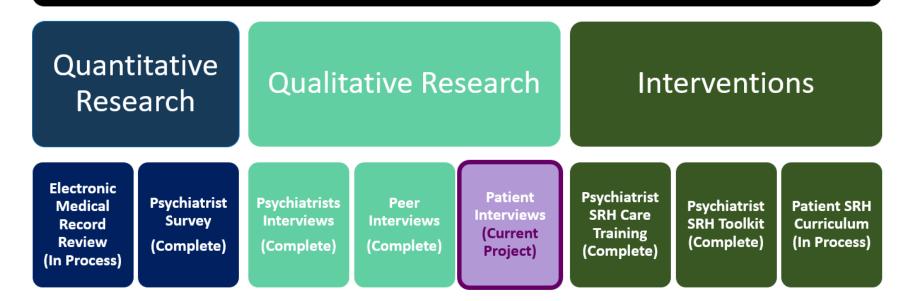


Figure 5. Diagram to Explain How Qualitative Patient Interviews fit into the overall Grady SRH Research Project

Previous Research: Electronic Medical Record Manual Data Collection

Previous research at the Grady Outpatient Behavioral Health Center has found that over 60% of patients at the clinic are either uninsured or underinsured (Gault, 2011). In addition, 84.2% of patients are African American (Gault, 2011). In 2012, Ward, (2013) found that over one-third of the patients had received care in Grady Hospital's emergency room within the past year, and 35% of the patients reported not having a primary care provider (Ward, 2013).

In 2015, members of the research team conducted a manual review of electronic medical records of female patients that visited the clinic between January 2014- January 2015 (Bougrab et al., 2015). The purpose of this data collection was to collect demographic information on the population and their current usage of SRH services. A total of 168 women of reproductive age with SMI at Grady Outpatient Behavioral Health Center were included. The sample was predominately African-American (82.4%) and the average age was 31.8 (Bougrab, et al., 2015). The distribution of SMI in this population was as follows: Major Depressive Disorder (29.17%), Bipolar Disorder (16.67%), Schizophrenia (12.50%), PTSD (7.74%), Mood Disorder (7.14%), Anxiety Disorder (6.55%) and Other Psychotic Disorders (17.26%) (Bougrab, et al., 2015). Although a majority of the sample had a primary care physician on file (67.26%), only 12.5% of women in the sample had a routine gynecological exam in the past year. The rates of women receiving a pap smear differed by SMI diagnosis. The three groups with the highest proportion of women failing to receive a pap smear were: PTSD (76.92%), Bipolar Disorder (78.57%) and Mood Disorder (91.67%) (Bougrab et al., 2015). Researchers acknowledge several limitations of the manual electronic data collection, which include accuracy and an inability to view services accessed outside of the Grady network.

Previous Research: Psychiatrist Survey

In 2015, researchers distributed a quantitative survey to psychiatrists at the Grady Outpatient Center to determine current SRH practices for females of reproductive age at Grady (von Esenwein, 2016, October/November). A total of 19 physicians responded to the survey, of which 37% were attending physicians. A majority of respondents (85%) reported discussing family planning with their patients "never," "very rarely," or "some of the time" (von Esenwein & Cook, 2016, October/November). In addition, 79% of respondents reported that they "rarely" or "sometimes discuss condom use with their patients." Similarly, 74% did not discuss alternative birth control methods such as birth control pills, IUDs, etc. with their patients. Furthermore, 79% did not ask/refer their patients to get a well-woman exam. However, 47% reported prescribing contraceptives to their patients. Psychiatrists reported the top three barriers to SRH discussions with their patients were time constraints (77%), forgetting to mention the subject (65%), and other topics taking precedence (65%) (von Esenwein & Cook, 2016, October/November). The results of this survey indicate that psychiatrists at Grady are not addressing the SRH care gap for women with SMI.

Previous Research: Psychiatrist Interviews

Current SRH practices among psychiatrists vary by location and level of training of the physician (Philip, 2016). Facilitators to SRH discussions with female patients of reproductive age are individuals with diagnoses with symptoms associated with hyper-sexuality (i.e., patients with bipolar disorder), side effects of medications that can either be teratogenic or cause sexual dysfunction, and psychiatric SRH training (Philip, 2016). The most common barriers to SRH discussions for psychiatrists are limited time with patients, their own discomfort, an inability to get patient consent, and issues concerning the scope of psychiatric practice. Depending on the

psychiatrist, SRH beliefs and attitudes can either enable or prevent SRH discussions in appointments. Furthermore, STI testing and treatment is conducted at either the patient request or if the patient mentions high-risk sexual practices such hyper sexuality, unprotected sexual encounters, or prostitution.

Current Research Project: Qualitative Interviews with Women with SMI

This study utilized qualitative interviews to explore contraceptive choices among women of reproductive age (18-44) with SMI. Qualitative interviews allowed female patients from Grady Outpatient Behavioral Health Center in Atlanta, GA to share their experiences with the health care system (Krueger & Casey, 2014). Additionally, this method allowed for deeper understanding into the cultural context, health care knowledge, and reproductive health beliefs surrounding contraceptive decisions with this population (Krueger & Casey, 2014). Semistructured individual interviews were held from July to December 2016. Semi-structured interviews are a data collection method that follows a prepared guide, but allows some flexibility in delivery and spontaneity of questions (DiCicco-Bloom & Crabtree, 2006; Kallio, Pietilä, Johnson, & Kangasniemi, 2016). This method was chosen because it allows for a natural rapport to be built between participant and interviewer. The interviews covered sexual history, personal relationships, reproductive health knowledge, and services received at Grady. The research study is a part of larger study on SRH (Study No.: IRB00078443). It received Institutional Review Board (IRB) approval by Emory University's IRB. The full interview guide is in **Appendix A**.

Study Sample

The inclusion criteria for this study are as follows: 1) female patient from Grady Outpatient Behavioral Health Center; 2) between 18 and 44 years old; 3) diagnosed with at least one of the following serious mental illnesses using DSM-V criteria: bipolar disorder, major depression, schizophrenia, severe anxiety disorders, post-traumatic stress disorder, cognitive disorders, and severe personality disorders. Previous literature has limited inclusion criteria to one serious mental illness category or diagnosis (Berenson et al., 2011; Borba et al., 2012; da Silva Magalhães et al., 2009; Freeman & Gelenberg, 2005; Matevosyan, 2009, Altshuler et. al., 2010; Miller et al., 2015; Nivoli et al., 2011; Viguera et al., 2000; Yonkers et al., 2004) This study was not limited to women with one SMI diagnosis, because very few studies utilize qualitative methods to characterize sexual and reproductive attitudes and practices of women with SMI (Matevosyan, 2009). Women received a \$25 Walmart gift card as compensation for participation.

Study Sites

Interviews were conducted at three study sites: 1) Grady Outpatient Behavioral Health Center (primary study site); 2) a Starbucks location convenient to potential participants; 3) a private residence in Covington, GA.

In-Depth Interview Guide

An in-depth interview (IDI) guide was developed by a team of maternal and child health students working under the direction of Dr. Silke von Esenwein and Dr. Martha Ward. A copy of the interview guide is in **Appendix A**. The IDI guide covers broad domains of contraceptive choices, SRH practices, and SRH care received at Grady. The interview guide was piloted with three female peer-educators with SMI. Peer-educators are a part of an Integrated Health Model at Grady (SAMSHA-HRSA, n.d.). Grady's peers are employees with lived experiences managing their mental illness and serving to promote resilience and stress management among patients (SAMSHA-HRSA, n.d.). The goal of pilot testing with peers was to ensure that the language was culturally appropriate for the target population (Kallio et al., 2016). Feedback from peers was incorporated into the final version of the guide used in this study. The guide follows the classic funnel technique moving from more broad questions to very directed questions (Morgan, 1996). The end of the guide contained contact information for the Mental Health Crisis Hotline for patients that experience stress or re-traumatization through discussion in the interviews.

Sampling and Recruitment

This study utilized convenience sampling methods to recruit women of reproductive age with SMI. Convenience sampling is a type of nonprobability sampling where target individuals are recruited from areas that are easily accessible to the researcher during a set timeframe (Marshall, 1996). Study recruitment occurred one of three ways: 1) from the waiting room at Grady Behavioral Health Outpatient Center; 2) through referral by Grady staff; and 3) snowball sampling through asking study participants to identify females of similar age that attended group sessions at the Outpatient Center (Hennink, Hutter, & Bailey, 2011).

Patients sampled from the waiting room completed a brief pre-screen questionnaire to determine study eligibility. The pre-screen questionnaire consisted of basic demographic questions and contact information including name, gender, age, diagnosis, cellphone number,

and email address. Feedback from primary investigators were incorporated into to the final version listed in **Appendix B**. Interviewees completed the questionnaire using an iPad.

Procedures

A total of 12 interviews were completed from July to December 2016. Interviews were conducted by two interviewers trained in qualitative methods. The interviews ranged in length from 20-45 minutes a piece. Each participant signed a consent form that was approved by Emory IRB detailing the purpose of interviews and minimal risk of the interviews. Patients were reassured that they could voluntarily terminate or refuse to answer questions at any time. Permission was obtained from participants to record the interview. Brief notes were written after each interview to give preliminary thoughts, ideas, and critiques of interview techniques.

Data Management and Data Analysis

Interviews were transcribed verbatim by four researchers. Any identifying information was redacted from the transcripts. All project materials (recordings and transcripts) were stored on a secured drive in compliance with IRB regulations. Recordings were deleted once transcriptions were completed.

Inductive thematic analysis was used to identify patterns in participant responses (Guest, MacQueen, & Namey, 2011). Qualitative analysis software, MAXQDA® version 12.1, was used to upload, organize, and annotate ideas. Two team members read the transcriptions and determined emerging themes from the data (Hennink et al., 2011). These members referred to the notes taken during the interview for clarification whenever necessary. The agreed-upon themes were consolidated into a thematic codebook. The two researchers, then independently coded a quarter of the transcripts before checking for intercoder reliability (Hennink et al., 2011). Any

discrepancies in codes and definitions were discussed and resolved before each researcher coded the remaining transcripts. Finally, themes were arranged into groups using the Andersen Model and the Intersectionality Framework. Researchers evaluated the relationships between themes and used sub codes as needed.

Results

Twelve individual interviews were held with women with SMI. This section begins with a description of study participants. The Intersectionality Framework will contextualize the background experiences of participants and the Gelberg-Andersen Behavioral Model for Vulnerable Groups will be used to organize participant responses. The health outcome of interest is contraceptive utilization among women with SMI. The themes to contraceptive use are organized within predisposing, enabling, and need factors of the Gelberg-Andersen Model (Aday & Andersen, 1974; Andersen, 1968; Andersen, 1995; Stein et al., 2007). The health outcome section is ordered by highly effective methodologies to least effective methodologies to prevent pregnancy prevention: celibacy, LARC methods, permanent contraceptive methods, SARC methods, and user-directed methodologies (Centers for Disease Control and Prevention, n.d.). **Figure 6** graphically depicts the themes that emerged in the interviews.

Participant Demographics

Twelve female participants ranging from ages 22-37 (average age 28 years old) were interviewed from Grady Behavioral Outpatient Center. Nine out of the twelve participants identified as African-American or Mixed Race-Black. The remaining three participants identified as Asian (Nepalese and Indonesian) or Asian-American. Self-reported diagnoses included bipolar disorder, post-traumatic stress disorder, major depression, schizophrenia, and general anxiety disorder. All women have been sexually active in the past. The number of reported past sexual partners ranged from one to over hundred. Eight women report currently being sexually active.

Category	Number of Participants (n=12)
Age	
20-25	5
26-40	7
Race Ethnicity	
African-American	8
Mixed Race- Black	1
Asian	3
Diagnosis*	
Bipolar Disorder	7
General Anxiety Disorder	2
Post-Traumatic Stress	
Disorder	2
Major Depression	3
Schizophrenia	3
Unknown	1
Sexual Partners	
1-4	6
5-10	1
10-20	1
21-30	1
31 or More	1
Unknown	2

Category	Number of Participants (n=12)	
Children		
0	7	
1-2	3	
3 or more	2	
Number of Abortion(s)		
1	1	
2	1	
Obstetrics/ Gynecology Utilization**		
Yes	5	
No	7	
STI Testing		
Yes	8	
No	4	

 Table 2. Demographics of Participants with SMI

*Three women self-reported more than one SMI diagnosis.

**Yes/No responses to Obstetrics/Gynecological Service Utilization in the past year

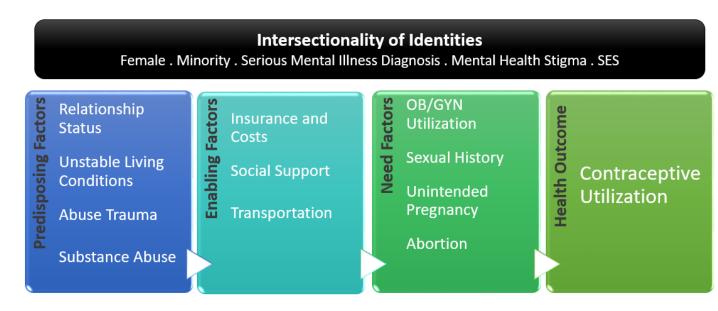


Figure 6. Factors influencing contraceptive decisions for women with SMI using the Gelberg-Andersen Behavioral Model and the Intersectionality Framework

Intersectionality of Identities

The Intersectionality Framework is a concept that states that there is an interaction between each social category that an individual represents (Bowleg, 2012). Every marginal group that an individual represents provides an additional opportunity to create disparities in health. The women included in this study are from two ethnic backgrounds and self-reported a mental illness diagnosis. The participants are suffering from a quadruple-burden of disease by being female, having a SMI, little to low resources, and being African-American or Asian/ Asian-American.

Half of the participants discussed how public perception of their mental illness has affected their quality life, relationships, and willingness ability to access mental health care. Participant 5 discusses the negative views that the Black community has towards mental health and mental health services.

Interviewee: "Even like this mental health, most people look down upon it but, especially in like our community, in the African American community. It's not like, it's frowned upon for it to go to the therapist and things like that. But if you look at it like, you go to the cardiologist for your heart, you know, you go to the ophthalmologist for your eyes. You got to go to someone for your brain. I mean it's all in the same temple. It has to function properly at some point. "- Participant 5 One twenty-four-year-old Black woman discusses her experience living at the intersection of having a mental illness and low resources. She was to drop out of college and relocate to Atlanta for mental health services. She discusses how hard it was for her to accept her bipolar diagnosis and find stable housing. Her denial of her mental illness caused her to not adhere to her medical regimen.

Interviewee: It was hard because I was like nothing's wrong with me. I'm not going to take this medication. So, I stayed in the hospital for six and a half months. Mainly because I, they were trying to find a place for me to live and a good environment for me to live where I wouldn't be stressed out and catch another panic attack. But, um, it was very hard for me to cope with being labeled bipolar disorder. Just 'cause the stigma that comes along with it and I refused to take medication for like the first two months."- Participant 4

Several participants noted that they are careful who they share their diagnosis with due to

cultural stigma.

Interviewee: "Um, I'm careful about who I disclose this to. Because, like, it's hard. I don't feel comfortable talking about it [...] There's so much stress. There is a lot of myths and misconceptions about mental illness."- Participant 12

Two participants stated that they have not shared their diagnosis with their partner because they

are unsure how they will take the news. Participant 7 has been in a relationship with her partner

for over a year and has not disclosed her mental illness to her. The only time she tried she was

overwhelmed with emotion and could not bring herself to tell her everything.

Interviewee: "That's the thing like I don't like...she knows stuff about me but she don't know stuff about me and it's like I feel I sit down and express everything to her so she can actually understand me better like I feel like I'm going to scare her away and she's going to be like, "what the f*** you got too much going on" and don't want to be with me anymore."- Participant 7

Mental health providers are not immune to having prejudice views against individuals

living with mental health. These perceptions can interfere with the appropriate health care

delivery that women with serious mental illnesses receive. This can further exacerbate the health

disparities experienced by this population.

Interviewee: "You know I guess my idea is that if you know that you are working with uhm people who are mentally ill and really are mentally ill then why are you treating them like criminals, you understand? It's just like you don't have compassion, you don't know how to talk to people."- Participant 8

Predisposing Factors for Contraceptive Use

Predisposing factors in this population that serve as barriers or facilitators to contraceptive use are relationship status, homelessness, abuse and trauma, and substance abuse.

Relationship Status

The relationship dynamic between the woman with SMI and her partner can either be a barrier or a facilitator to contraceptive use. Participants were asked about their current or most recent sexual relationship. Five out of twelve women reported being in a consistent sexual relationship. These relationships ranged from loose uncommitted arrangements to exclusive partnerships. Contraceptive usage varied among participants who were single and those in single-partner relationships.

Participants 2 and 10 reported that they were engaged. Neither woman uses condoms with their partner. As stated before, Participant 10 has four children. She and her partner do not want to have any more children. As a result, she is the only IUD user in the sample. On the other hand, Participant 2 either wants more children or to use condoms because she is not using any other contraceptive, but her partner does not want to comply to either of her requests. When asked who makes decisions about contraception in her relationship, she stated that he has control.

Interviewee: "I mean, I talked to my fiancé, I tell him, 'look, I want a baby, I want a baby right now.' But, so he like, 'no baby, we gotta wait' you know?… I'm like, 'this is up to me, you need to give me a baby now." I be tellin him, 'look, if you don't give me a baby I'm gonna leave'… So I'm like, 'okay, be patient.'"-Participant 2

The term "friends with benefits" was used by participant 5 to describe relationships that are intimate and sexual but not exclusive. This relationship is distinct from sexual encounters that are strictly based on physical attraction, often with someone whom one is not familiar. This term can be applied to the sexual relationships that participants 1 and 3 have with the father of their children. Participant 1 is not using condoms with her partner because she is comfortable with him. Participant 1 has undergone tubal litigation that prevents her from having an unintended pregnancy. However, she is not protected from STIs. She states that she and him "show papers" to ensure that they are safe.

Participant 3 is the only woman who indicated that she uses condom consistently with her stable sexual partner. She made the decision to use condoms with her children's father because they are no longer in an exclusive partnership. When her partner made excuses, she found alternative sources to ensure that there was a steady supply condoms.

Interviewee: "Then I started, but at first I started let him get the condoms and then I realized that, that he wasn't very dependable and that since he don't want to use them so he don't buy them, so I started getting my own."- Participant 3

None of the seven single women are on a female-controlled birth control method. Among these women, four of them are using celibacy as a form of birth control. These women report not using condoms when they are comfortable with the person they are engaging in sex.

Interviewee: "Um, it all depends on the person. It's like I said, um, uh, like a couple months ago, I mean, I was involved with someone. And we didn't use condoms. But, I know that he don't have anything cause every time I would say, 'I'm gonna unprotected sex... I'm gonna go to the doctor'."- Participant 9

Abuse and Trauma

Most the sample has experienced physical, sexual abuse, or sexual assault from family or

caregivers, partners, and others. The trauma has impacted future sexual relationships, self-

esteem, and overall wellbeing.

Physical Abuse

Four out of twelve women report experiencing intimate partner violence from a past or a current partner. The physical violence put women at a disadvantage for negotiating contraceptive use. Participants 2 and 11 agreed that their abusive partner makes/made the decision about contraception. Among all participants who experienced intimate partner violence, there was an underlying fear of future harm to them or their children.

Interviewee: "I know that he can hurt me because he has hurt me before. But I'm like, "don't get that angry that you wanna take it out on, you know, use a weapon or something."- Participant 2

Interviewee: "My, my ex, you know, he was in a gang. And, um, I walked in, I knew it when I first met him. And he was drug dealer, and, um, he was... I: Is that your son's father? P: Yeah, he was a very, a violent person. I mean, to anyone. I mean, he caused a lot of people to get killed. From little children to gang violence. Um, he tried to kill me and my son. "- Participant 9

Sexual Abuse

Half of the sample have been victims of sexual abuse which is often perpetrated by someone in a position of authority that takes exploits a person's trust . These individuals have been abused by immediate and extended family members, family friends, and partners.

Two participants were sexually abused by trusted adults. Participant 8 describes how hard it was for to grow up in a household in which her father sexually assaulted her. Interestingly, her early negative sexual experiences caused her to take control of her sexuality. As a result, she engaged in safer sexual behaviors upon sexual initiation. However, this participant admits that the abuse has prevented her from maintaining healthy romantic relationships. She has been celibate for 12 years.

"Yes, we used condoms. I very deliberately, it was a deliberate choice on my part to lose my virginity on a specific date to my boyfriend. I consciously said to myself I am taking ownership of my sexual power and identity back from what I felt my Dad took from me. So my boyfriend at the time didn't know I was being intentional, but you know like I did bathing ritual, got dressed in a special outfit and I was saying to myself, "this is for me, I am doing this for me." So that I can know the first time I chose to have sex I was conscious of the matter of me taking ownership of my body back of my sexuality back...and we used condoms (laughter)."- Participant 8

Participant 10 is a victim of intimate partner violence. She dated a controlling man for a

year. She openly shares her experiences with sexual violence and how the hospital staff helped

her leave the relationship. The experience has impacted her quality of life and affected her

relationship with her fiancé and her children.

Interviewee: "And, um, I was in a, an abusive relationship." Interviewer: "Oh, with someone else?" Interviewee: "Yeah, with someone else. And, um, I was held captive and, um, he was like, beat up almost every day, raping..." Interviewer: "Oh, my gosh!" Interviewee: "Um, the guy, he would tell me I didn't have any family cause I had to give the kids away because he, he, you know, it was lookin' like he was gonna, you know, hurt them. [...] Yeah. And, um, he crashed the car into a poll. And um, tried to kill us both. And he

wasn't even hurt. I was, though. I broke my pelvis in three places, my leg was broken, yeah. I couldn't walk for, like, six months."

Sexual Assault

Four participants have been victims of sexual assault, which are often traumatic,

unexpected, and violent event(s). These assaults have impacted the sexual relationships that the

women in this sample have formed. Participants 1, 2, and 10 were assaulted during periods of

homelessness.

Interviewee: "I was raped at 15. Um, every sexual experience that I had around that time was pretty much the same kind of.... [Pause] It was never really great until now. And it is still kind of uncomfortable-ish... in my relationship, he didn't really understand that. Like there are some things... It took me a while to really open up to even have sex with him." - Participant 1 Participant 6 discusses her feelings after being kidnapped and raped. The experience has challenged her feelings of self-worth and negatively impacted her mental health. She was brought to Grady after a suicide attempt.

Interviewee: "Because I was kidnapped and raped. And he was like, they, they had just gave me that as an answer to what was wrong with me. 'Cause I kept asking, "why me? what was wrong with me?" And then, "why do I have, why should I pray for this man, why should I not hurt him?" And then, "well why do I have to still live?" I need to hurt myself so that's what I was thinking. I just didn't want to feel like that no more."- Participant 6

Substance Abuse

Three participants reported using alcohol, marijuana, and/or illicit substances to manage their mental illness. The use of these substances have influenced their quality of life, disrupted family dynamics, and impacted their sexual and reproductive health.

Participant 5 stated that she preferred marijuana use over her medication. She finds it

relaxing. Her use of the illicit substance has gotten her expelled from an intensive mental health

program. She is currently supplementing her mental health services at Grady with group

psychotherapy for a more holistic approach.

Interviewee: "Um, and I don't even, I don't take it [medicine] like I'm supposed to. I really only take it when I feel super anxious because it makes me, um, it makes me groggy and really drowsy... so for the most part I'll just, I'll smoke [marijuana]."- Participant 5

She also reports that she is consciously attempting to limit her sexual encounters. Unfortunately, her efforts can be modified by alcohol or drug use.

Interviewee: "You know and to just kind of build our connection. That's kind of the only reason I have sex now unless I'm like drunk. And then it's just like for it to feel good."- Participant 5

Participant 2 has a history of illicit drug abuse. Before rehab, she admits that "…in my, my drug addiction, I got raped." DFACS has taken custody of her three children because of her substance abuse problem. They are currently in foster care where she cannot reach out to them until they are 18. Participant 2 wants to have two more children and to raise and is not currently using a birth control method with her fiancé.

Interviewee: "And then my kids are no longer with me 'cause I was... in transition from rehab.

[...]

Drugs. I was doin cocaine... So I couldn't get them."- Participant 2

Unstable Living Conditions

Unstable living conditions are defined as periods of transitional (one-time shelter use), episodic (reoccurring/ sporadic), or chronic (continuous/ongoing) period(s) of homelessness (Kuhn & Culhane, 1998). Six participants mentioned a history of homelessness. Being homeless had a negative effect on participant's sexual and reproductive health. As previously mentioned, three participants were sexually assaulted during periods of homelessness. Beyond sexual assault, women report having trouble accessing mental health services when they are episodically homeless. Sexual and reproductive health services are not a top priority in a time of transition, although participants report that they would like to delay or prevent pregnancy.

Interviewee: "On being pregnant? Oh, no 'cause I haven't thought about being pregnant especially in my situation. I don't want to bring a baby in this world right now. And I know I have a, I don't have a job or a stable place to stay or stuff like that so not right now but maybe in the future."- Participant 6

Enabling Factors for Contraceptive Use

Enabling factors are components that help individuals access the services necessary to improve the outcome of interest. Enabling factors for contraceptive use among women with SMI are financial support, transportation, and social support. Lack of access to these factors can pose barriers to contraceptive use.

Financial Barriers

Four participants explicitly stated that they do not have insurance. Among these women, three participants reported that a lack of insurance directly affects their ability to schedule a wellwoman exam at Grady.

Interviewee: "I don't have any health insurance right now, so I really get my medications through Grady and through seeing doctor, but I haven't seen an older [gynecologist] doctor."- Participant 4 These three women have begun or completed the process to acquire a Grady Card. The

Grady Card provides financial assistance and for low-income patients to receive access to health care at Grady.

Although Participant 4 identified that she does not have insurance, she has a Grady card.

At the time of the interview she did not realize that the card could help her access services

outside of her mental health care.

"Interviewee: ...I have a Grady card so that is basically my insurance I think. [...] Yeah. Well, Grady card, they don't really allow you, well do they? I was already getting medication before through the doctor so I'm not sure if that part [SRH service] is with the Grady card but I know they cover my [mental health] bills through the Grady card. "- Participant 4 Participants 6 and 7 are in the process of acquiring a Grady Card. Last year, Participant 6 received free women's health services from a traveling medical team. She expresses that she would like to go to Grady this year for SRH services. However, she reports that she is having trouble getting the required documents to obtain a Grady card which will allow her to access health care at a reduce cost.

Interviewee: "Back and forth. 'Cause I didn't have any insurance so I had to go to the emergency room. And now I got to pay back all those bills. But they trying to help me out to get a Grady card. And get my ID, my birth certificate and my social security card back on. So, I got my birth certificate and my ID. Now I just need to get my social security card."- Participant 6

It is important to note that insurance is not the only barrier to well-woman

services. Participant 5 has insurance through her job, but she has not had an appointment

since college. The reasons for this are mentioned in Transportation Barriers.

Interviewee: "And I have like health insurance through my job. Like I can easily call and get an appointment with an OB-GYN. You know I can easily call and get access to all this other stuff."- Participant 5

Transportation Barriers

Proximity and transportation is a factor for women to receive annual reproductive health services. Participant 5 is the only woman to report that she has health insurance through her employer. However, she has not gone to get an annual exam in the past year. She reports that she had a scheduled appointment to see a gynecologist but she was unable to attend. She says that it hasn't been a priority to reschedule because she is focusing on her mental health.

Interviewee: "I was, I was in college. So, I mean, at [college name] we had an actual like health center and they had OB-GYNs on campus. So, I went every year for my yearly. It's just since I haven't been at school the access to it, like it was literally walking distance from my dorm. [chuckles]"- Participant 5

One Nepalese immigrant is benefiting from the SRH services provided by Grady Behavioral Outpatient Center. She states that it is hard for her to get to and from Grady for her appointments or to participate in group classes. The opportunity to have SRH services before or after her monthly mental health appointment saves her a lot of time and money.

Interviewee: "I wish I could go [to group classes] but the Grady, does not fund for, like, MARTA cards."- Participant 11

Social Support

Social support is a facilitator of first contraception use. Parental, particularly maternal, influence prompted three participants to get birth control as a teenager. The first contraceptive method of choice was birth control pills.

Interviewee: "My mom put me on birth control when I was like 13 Interviewer: 13? Interviewee: She said she just wanted to be safe. I wasn't even having sex."-Participant 7

However, maternal support was not always sufficient to keep participants using

contraception when they became adults. All women discontinued birth control pills once they

become autonomous adults. Participant 7 discontinued use of any prescribed birth control

method at the age of 18, the same year she became sexually active. She currently is not on any

form birth control method.

Interviewee: "When I was 18, she was like...you have to choose, if you want to do it. You're grown if you don't want to take it anymore...it was just like my medicine she was like you're grown, and I was okay I don't want to take it."-Participant 7

There are alternative ways that mothers can facilitate the use of other forms birth control. For

example, Participant 3's mother was a condom user before marriage. Once she married, she gave

Participant 3 her condoms to use to protect herself from pregnancy and STIs.

Interviewee: "So, then my mom got married and I got, and I got my stash of condoms plus her stash of condoms so I never run out. So, then my mom got married and I got, and I got my stash of condoms plus her stash of condoms so I never run out." - Participant 3

Beyond parental influences, social support from friends and extended family can

influence women with SMI to pursue contraceptive options. Two participants (9, 10) reported

that their social networks shared their experiences with contraceptives. Their support prompted a

well-woman visit that resulted in birth control use.

Interviewee: "I'm just like, you know, I've been raised, I've been raised differently. I know about STDs. Since I was a teenager I was goin' to Planned Parenthood, but my mother didn't know."- Participant 9

Interviewee: "Yeah, because um, a lot of friends of mine have been, like, 'after three years I got pregnant."" Interviewer: "Oh, really?" Interviewee: "Yeah. I'm like 'oh my God, no, please!""- Interview 10

Need Factors for Contraception among Women with SMI

There is a high level of need for contraceptive use for this population. Only one woman reports current use of a LARC method and one has undergone sterilization. Seven out of the remaining ten women wish to delay or prevent pregnancy. Although, four out of twelve women are not currently having sex, they all foresee themselves having sexual relationships in the future.

Well-women Visits and Prevention Services

Approximately half of the women have gone for preventative health services in the past year. It is recommended that women between the ages of 18-44 make routine primary care visits to discuss contraception counseling, get STI testing, and other preventative health services (The American Congress of Obstetrics and Gynecologists, n.d.). Women visiting a gynecologist for primary prevention services are more likely to be using a contraceptive method. There are several factors that contribute to a woman's ability to access SRH services: motherhood, finances, and transportation.

Motherhood

Three out of five mothers have seen a gynecologist in the past year. One participant is using a permanent methodology and one is a consistent user of condoms. The remaining two mothers are notably different, they both do not perceive a need for SRH services. Participant 9 desires to have more children and does not have a need for prescribed contraception. Participant 10 has an IUD and has not gone to see a women's wellness provider since her three-year-old son was born. Participant 3 discusses that she has overcome her fear of SRH services. She now in a habit to go to gynecologist.

Interviewee: "Oh, it's, it's pretty routine now. So, um, like in the beginning, initially, first getting those things for the first time, it's very scary. But you know, you, you get used to it. You know, over the years."- Participant 3

Among the women that are not mothers, there is a variety of reasons why they do not access SRH services for prescribed birth control. One salient theme is that there is a lack of perceived need or fear of services.

Participant 8 is a thirty-seven-year-old woman has not had sex in over a decade.

Therefore, she does not perceive an increased need to use a gynecologist for contraception. In

addition, she wants to have children soon and does not want to use something long-acting that could impact her fertility. The last time she went to her gynecologist was 2014. There she was tested, received a pap smear, and family planning counseling.

Interviewee: "Oh have I gone to an OBGYN." [...] Interviewee: "Oh the last time I'd gone to the OBGYN was I want to say 2014." Interviewer: "2014? And did they prescribe you any birth control?" Interviewee: "No because I haven't been sexually active in a while-."- Participant 8

One twenty-two-year-old expressed fears about going to a gynecologist for the first time.

Although she is a nursing student and is aware of the importance of these services, she is

embarrassed to get SRH services. She currently is not having sex, but in the past, she reported

consistent condom use.

Interviewee: "I know 21 is the age. But yeah, I haven't done it yet. I'm kind of scared and embarrassed to go. [Laughs] It is one of those things I have on my list to get done."-Participant 12

Sexual Partners

All the women had a history of sexual activity. The number of reported past partners ranged from one to over hundred. Four women stated that they had more than five sexual partners. The number of sexual partners is unknown for two women. Current contraceptive use among women with high and low numbers of sexual partners.

Participant 9, is thirty-six-year-old mother of a teenager. She began having sex at the age

of 14. Over the course of her sexual history she states that she has had 100 partners. She is not

currently not using contraception because she desires to have another baby. However, she says

that she gets a pap smear and STI testing every year.

Interviewee: "Oh, though, probably like a 100 people. But I get my pap smear done every year." - Participant 9

Participant 5 reported having around 20 sexual partners. She used to take birth control inconsistently and now uses condoms when she does not know her sexual partner. In the past, she reports having to us Plan B a few times when she felt there was a contraceptive failure.

Interviewee: "...even like when I was younger I was, I mean the reason my ballpark number is so high, I was very promiscuous. So, it was just kind of like, it was no, it was no like, you know if I even thought about it, it was just like okay, it can happen. If, you know, you're cute. If you check these three things off the list then we're good to go."- Participant 5

The six women with lower numbers of sexual partners also have a history of safer sexual practices. For example, Participant 3 has only had three sexual partners. She is currently having sex with one partner but is using condoms consistently. She cites the high STI rate in Atlanta and pregnancy prevention as her two main reasons for using condoms.

Interviewee: "And I was just like, 'I wanna be around for my kids.' So, yeah... And you never really know what the next person doin'."- Participant 3

Unintended Pregnancy

Women with SMI are at an increased risk for unintended pregnancy (Takahashi et al.,

2012). Five out of twelve participants report having at least one unintended pregnancy.

Unintended pregnancy has led four participants to use some form of contraception.

Participant 1 reports that her first child was the consequence of sexual violence at the age of 17. After the birth of her second child, she asked for tubal litigation surgery. Even though she would like to have more children, she recognizes that she does not need anymore. She is struggling trying to manage her mental illness and does not have enough family support to continue having children. Her tubal litigation allows her to not use condoms with her children's

father even though they are in an open relationship.

Interviewee: "I: Yeah, yeah. I uh...Well my first child was the result of one of those problems. Of course, I went to the hospital and had the baby and stuff. They didn't know it was because [of sexual violence] ... they didn't know he was conceived because ... you know. I didn't go to the hospital with help with that... but I did, you know, end up having a baby. You know, yeah."- Participant 1

Participant 10 is a twenty-nine-year-old mother of four girls under the age of 10.

She explains that all her pregnancies were unintended. The fourth pregnancy led to a

diagnosis of post-partum depression. She knows that she no longer desires to have more

children. As a result, she has opted for an IUD and is satisfied with her contraceptive

method of choice.

Interviewee: "Well, the first two, they were two years apart. And, um... And they just came when they wanted to. So, um, I was like, really tryin' not to get pregnant with the second, well, with the third one. And, um, I actually, just, it just popped up. And then the next year my baby was three months and then I found out I was, I was pregnant again."- Participant 10

Abortion

Nearly half of the sample reported having at least one unintended pregnancy. However,

only two reported that they voluntarily ended a pregnancy. Abortion may be a facilitator of

contraceptive use for some people.

Participant 10 reports having an abortion because her pregnancy was due to rape. At the

time, she was homeless and did not feel as if she could raise a child. She is the only user of a

LARC method in this sample.

Interviewee: "Okay, when I was 15 I left the house, and you know, 15-year-old. Um, I was also in a couple of situations where I was, um, gang raped. Um, I, you know, I got pregnant one time, because, you know, I had an abortion, because of that." - Participant 10 Participant 5 is a single twenty-five-year-old woman who has had two abortions. She describes a range of factors that led to each decision. When she got pregnant the first time, she was a sophomore in college. A condom was used inconsistently and resulted in pregnancy. Her partner at the time was someone she cared and trusted. He went with her to get the abortion and paid for the procedure. She said she was not in the financial position to take care of a child.

Interviewee: "Um, naw, I think the first, for the initial time that it happened, we, we'd been so comfortable with each other for so long that it never, it [condom use] never came up. And then that time he actually put it on and took it off. So, it was just kind of like, yeah... I guess it was going to happen."- Participant 5

The second time she got pregnant, she was twenty-four and had a stable job with insurance. She admits that, "...I wasn't like using contraceptives either so it was just kind of like, I mean it's my fault [laughs]." She did not think that she would get pregnant for a second time.

Interviewee: "And then I, I do have this like this fearless mentality. It's not even like fearless, it's just, it's just rare that bad things happen so [chuckles] I would just like ok it's not going to happen and then it happened. I'm like okay, it won't happen again and low and behold." - Participant 5

Her partner at the time of the second pregnancy was not as supportive. He convinced her to get an abortion. Later, she found out that he had gotten another girl pregnant and they decided to raise the child together.

Interviewee: "And then he ended up kind of like convincing me to get the abortion and she kept the baby. So, it was like, that was kind of like super depressing. It's probably one of the, the things that kind of slipped me into this little mode here but, you know, it's sad."- Participant 5 The circumstances surrounding her first and second abortions were very different. However, Participant 5 explains the underlying reason for terminating her pregnancy was the same each time. Both times she did not feel as if she was in a situation in which she could properly nature a child.

"I'll probably be one of the oldest, the oldest moms in the PTA meetings at kindergarten. And that's fine with me 'cause I'd rather it be a child brought into a world of love and not like, 'I'm trying to keep him.' Or 'oh, I don't believe in abortion so let me struggle' and just to the 'love is enough'.... And then a lot of parents don't get that, the things they do to their children as children, they can't undo when they're adults. And it sends them places like here. So, it's just kind of like, I would try to prevent all of this for my child. And until I can do that I'm not going to bring one in."- Participant 5

Although Participant 5 is not using any female-led contraception, her abortion

experiences have taught her to change her sexual practices. She is currently uses condoms with

sexual partners she does not know very well.

STI History

Seven women reported getting screened for STIs and HIV at least once in their lifetime. None of these women reported having a STI or HIV. Several participants mentioned screening upon intake into the Grady Emergency Room. However, a minority of women mention voluntarily getting tested routinely. One woman who is in an open relationship with her children's father reports that they both get tested frequently. This allows them to continue to have unprotected sex without fear of sexual transmission of disease.

Interviewee: "Yeah, I always ask questions. Some people don't like that. But, it's my health. I did have a tubal, I can't have kids. But we talked about condoms and chose not to. But, you know, I, I do get myself checked out, everything is good. He does too as well. I do show papers. People don't really do that, it's a little extreme! [Laughs] Um.. so as long as it is clean. And we did talk about, that even though we're not in a relationship right now, we wanted to keep it, just one at a time. It's just me and him right now. And if he does want to go elsewhere, he needs to let me know. So we did actually talk about it."- Participant 2

One twenty-four-year-old patient reported never getting screened for STIs or HIV. She

has had only had sex intermittently with three people in her lifetime. The only person she has had

unprotected sex with was her boyfriend of four months. Although she recognizes the risk, it is

not a high enough priority to get tested.

Interviewee: "Just, I haven't, I've had sex but I haven't gone in with my, well my ex, and um, got checked out like how they say you should both get checked before you have sex because I just trusted him and what he said about his sex history. So, the question I would have is, basically, is it dangerous to not, you know? But, I've common sense, it's telling me that, you know, we should both get checked before we indulge in sex."- Participant 4

Health Outcome: Contraceptive Use

Participants were asked about their past and current contraception use practices. A wide variety of contraception options were tried by participants including permanent methodologies, long acting reversible contraception, short or immediate contraceptives, and celibacy. Every participant has tried at least one contraceptive option. Due to a large number of available contraceptives, the findings presented below will be restricted only to the contraceptive choices discussed in the interviews. The results will be presented from most to least effective options for pregnancy prevention.

	Ever	Current
UsersUsersHighly Effective Methods		
Celibacy	-	4
Implant	1	0
IUD/IUS	2	1
Sterilization	-	1
Injectable	4	0
Pill	5	0
Patch	2	0
Ring	1	0
Moderately Effective Methods		
Male Condom	12	*3
Least Effective Methods		
Female Condom	1	*1
No Method	-	3

Table 3. Distribution of Contraceptive Use among women with SMI1

*One woman reported both female and male contraceptive use.

Celibacy/ Abstaining from Sex

Four women are using celibacy as a form of contraception. Three women did not have sex in the past year. The most commonly cited reasons for celibacy were sexual or physical abuse, unhealthy relationships, focus on mental health and wellbeing, and/or academic attainment.

One thirty-six -year-old woman reported not having sex for sixteen years. As a child, she was sexually abused by her father. She has had one sexual partner in her lifetime. She believes that the abuse has affected her ability to have a sexual relationship. Instead, she has chosen to focus on her career.

Interviewee: "I have just been someone who has been so caught up in my academic studies and someone who has not actively sought out relationships... it's not as if I didn't like guys and they didn't like me back, but you know I've always been self-motivated to be successful. And now that I have had my professional accomplishments, I know that when I got these things set, I am wrapping up getting the help I need at Grady you know, I know who I am and I won't settle for less."- Participant 8

Participant 4 is twenty-four and trying out celibacy for the first time. She is the only one among this group that has had sex in the past year. She cites her recent break up with her boyfriend and the stress of her mental illness diagnosis as her main reasons for not wanting to enter another sexual relationship. However, she is unsure if she will be able to completely stop having sex.

Interviewee: "But even though I'm trying to practice ceb, ce..." Interviewer: "Celibacy" Interviewee: "Celibacy. Um, it [contraceptive options] should still be good information I should know just in case I don't follow through with celibacy. But that's what I would like to do. Follow through."- Participant 4

Long Acting Reversible Contraception (LARCs)

LARCs are the most effective contraceptive method besides sterilization. Three out of twelve participants have ever used a LARC method. To date, only one is a current user. Women wishing to conceive stated that they do not want to use a LARC. For example, Participant 8 is not interested in using a LARC method. She is a single thirty-seven-year-old woman who wants to have children in the near future.

Interviewee: "Yeah I mean yeah I don't... I anticipate being sexually active... you know I'm concerned doing anything long acting because you know I'm older... and I do want to have kids"- Participant 8

Intrauterine Device/ Intrauterine System

Two participants out of twelve participants have ever used an IUD or IUS. Neither participant had complaints about the device or the procedure. Participant 1, is a single 21-yearold mother of two. She had her IUS removed for unspecified reasons. Upon reflection, she regrets her decision to have it removed. Shortly after her procedure she had her second unintended pregnancy.

Interviewee: "... I got the Mirena®. It was pretty good for the most part. Uh not too many big complaints. But, uh I did get it taken out and I got pregnant. So [laughs] I probably should've kept it. You know?"- Participant 1

Conversely, Participant 10 has used her IUD for three years. She is a mother of four children, and stated that each of her pregnancies were unplanned. She reports being diagnosed with postpartum depression three months after the birth of her third child. This diagnosis came around the time she learned that she was pregnant with her fourth child. She began using an IUD shortly after the birth of her fourth child. She chose this method because she and her

partner do not want any more children. However, there is concern about efficacy now that she

has used it for an extended period of time.

Interviewee: "It's like, the, um, like a, the thing they put in there that lasts for five years?" Interviewer: "So, is it like, the, IUD?" Interviewee: "Yes, that's what it is." Interviewer: "Oh, then you already have one?" Interviewee: "Yeah, but it's been, like, three years, so, you know, I might need to..." Interviewer: "Talk to someone else about it?" Interviewee: "Yeah, because um, a lot of friends of mine have been, like, 'after three years I got pregnant." Interviewer: "Oh, really?" Interviewee: "Yeah. I'm like 'oh my God, no, please!'"- Interview 10

Implant

Despite several participants having knowledge about the implant as a contraceptive method, only one twenty-seven-year-old participant reported using a contraceptive implant. She only used it for a short period of time. She discontinued this method for the same reason she discontinued other forms of hormonal birth control, she did not like that it made her nauseous.

Interviewee: "Then, I tried the implant... for like a week then I took it out because it kept making me sick.... It was just like I was just throwing up a lot and dizzy and oh. So I took it out. Actually, it was right here *points to upper arm*."- Participant 7

Permanent Contraceptive Methodology

Sterilization

Only one twenty-one -year-old participant has undergone tubal ligation surgery. She is a parent of two toddlers. She mentions that she tried other contraceptive options such as condoms, IUS (Mirena), and the ring but she was dissatisfied with all of them before choosing sterilization. Both of her pregnancies were unintended. The first child is a product of sexual violence and the second child was conceived shortly after removing her IUS.

Interviewee: "Uh... I know I had mentioned it before I did went to get tubal. I was saying how I didn't want any kids, and she did talk to me about my options. She did ask if I wanted anything else. But I was like, 'nope, I don't want anything else. I want to do it.' And that was about it."- Participant 1

She believes that her social, financial, and mental condition are not conducive to having more

children.

Interviewee: "Like I was saying, it's not that I don't want any more children, I am just not in a situation where I need any more children. Um, just you know with the mental health issues. And family-wise, it's just not great. Uh, yeah."-Participant 1

The only other woman considering tubal ligation is a twenty-five-year-old woman with

two children. She is an adamant condom user that wants to prevent future pregnancies. She does

not believe that she can effectively manage her mental illness and have additional children.

Interviewee: "I'm actually might just choose to get a whole hysterectomy, I don't really know. (laughter). They asked me when I had my last daughter and I was like, 'no.' But then after the fact I'm like, 'I should got one' My mom just swears by it, she got one. "It's the best thing," I'm like, "yeah."- Participant 3

She expresses regret after not having the surgery done after her second child. At the time, she

was exhausted from labor and did not want to undergo an additional procedure.

Interviewee: "...I had a C-section, you know, I wasn't tryin' to get no extra, just get in and get out. But yeah. I was, I don't know, you never know what tomorrow brings."- Participant 3

Short Acting Reversible Contraception (SARCs)

Injectable Contraception

Four out of twelve women reported trying injectable contraception at some point during

their lives. However, none are current users of injectable contraceptives. Common complaints

about this contraceptive option is that it required a physician visit, lack of a regular cycle, weight gain, and wanting a future pregnancy.

Participant 10 used injectable contraceptives for six months. Shortly after she stopped using this short-acting method she became pregnant. When asked why she discontinued taking the shot she had trouble articulating an answer. She admits that she was lazy, indicating that she had trouble making the visits necessary to continue the method as recommended. She is unsure of the efficacy of the shots because of the unintended pregnancy.

Interviewee: "I guess it [the shot] worked but I don't know... I guess like, right after I got off of the shot, I got pregnant. "- Participant 10

Participant 7 has tried several forms of short-acting contraception such as condom, the birth control pill, and patch. She has discontinued them all. She currently identifies as a lesbian. At the time of her Depo-Provera use, she had male sexual partners and described some problems she faced using the method, including inconsistent menstrual cycles, intense cramping, and weight gain.

Interviewee: "I didn't like the way I was gaining weight. I also didn't like the fact that I wasn't having a period because I didn't feel like a woman."- Participant 7

She also expressed concern about the length of time it took for her period to return to normal after stopping injectable contraceptives.

Interviewee: "...And then it took for so long for me to have a period after the fact. Like two years after the fact that I stopped and what if I do want kids? I want my reproductive system to be normal."- Participant 7

Despite her complaints about injectable contraception, Participant 7 states, "...the shot was my

best bet [to use contraception]."

Like Participant 7, Participant 9 stopped using injectable contraception because she has plans to conceive and has concerns about returned fertility. She had issues conceiving her first child and is currently hoping to have another.

Interviewee: "No. I had been [on birth control] in the past. When I was with my son's father, my, uh, my fiancé... I was on birth control, but, far as in the shot at that time. But, like, now, I'm not. You know? Because when I had my son, it was very hard, for me to get pregnant."- Participant 9

User-Directed Contraceptive Options

User-directed methodologies are contraceptive methods that range in ability to protect against unintended pregnancy. These methods are user-initiated and require various amounts of preparation. This is the most common form of contraception among participants.

Birth Control Pills

Nearly half of the participants have used birth control pills as a contraceptive option)., None of the women reported being current users of oral contraceptives. The main reason for cessation of oral contraceptives was forgetting to take the pill as recommended.

Participants began birth control pills for a variety of reasons. For a majority of women, it is the first prescribed form of birth control pills. Participant 8 describes going to a gynecologist as a teenager because her parents found out she was sexually active. The doctor prescribed birth control pills for her. When she had the autonomy to make the decision herself, she stopped using birth control. She was in a relationship at the time, but having infrequent sex so she decided to use condoms. Interviewee: "But you know when I first went as a teenager when my parents found out I was sexually active I was on the birth control pill for about a year and a half and then I stopped in college and used exclusively condoms."- Participant 8

Two women reported taking birth control to regulate their heavy menstrual cycles. One

thirty-six-year-old woman reports the extreme discomfort she felt every month.

Interviewee: "It [my menstrual cycle] ain't pleasant, trust me. (laughter). It just, I, if I could be a man for a whole week while that's happening, if I could give it to somebody else for that week, I would do it."- Participant 2

However, she discontinued taking the pill because it caused health issues.

Interviewee: "Cause the birth control give me, um, blood clot, two blood clots. In my leg, on my right leg and in my lung. So, I can't take it."- Participant 2

Three participants reported forgetting to take birth control pills. Participant 3 reported

that she used the method for a year before switching to injectable contraception. For Participant

5, her irregular schedule made it difficult for her to take the pill on time which prompted her to

stop using the method. She currently not having sex to focus on her mental health.

Interviewee: "I wasn't taking it every, I wasn't taking it right. And I was in college, and you know that life is like, I may be up at 8 am but then tomorrow I don't, I don't have class at all so I'm just going to sleep. And then you know tomorrow I have to work and so I would never take it properly."- Participant 5

Contraceptive Ring

Three participants discussed the contraceptive ring. Only one tried the ring. Participant 7 was offered a contraceptive ring, but she declined because she did not like the fact that it could slip out during intercourse. She opted for the implant instead.

Participant 1 is the only participant who has used the contraceptive ring. She states that

the ring is an inconvenient and unsafe form of birth control. She also cites intense cramping.

Participant 1 has now chosen a permanent method to prevent future pregnancies.

Interviewee: "I just wanted something that I didn't have to worry about. I didn't want something that I would have to take out and put it back in. All that stuff. And it could come out. And I was having all kinds of cramping and stuff. So I thought I would try something else."- Participant 1

Contraceptive Patch

Two participants reported using contraceptive patches. Participant 10 is a mother of four children. She has been in a relationship with the same individual for the majority of her adult life. Over the course of her relationship, she has used a variety of contraceptive methods. The contraceptive patch was a success for preventing pregnancy at the beginning of her relationship. However, the patch had some physical side effects that prompted her discontinuance of use. She also tried the short-acting contraceptive shot. She is a current user of an IUD.

Interviewee: "Um, for, I didn't get pregnant for four years, and it's like, the first four years we were together because I had, a, um, what's the name, the patch things... It kinda worked out for me, because then I started like, um, side effects from it. Um, because, like, um, it made me have, like, bruises in the area and um, my hair had started, like, gettin thin..."- Participant 10

The other participant had limited success with the patch. Like other contraceptive

methods that she has tried, she had trouble adhering to the recommendations. She did not use the

patch for very long.

Interviewee: "Yeah I had the patch and I forgot...I couldn't remember to put the new patch on and stuff like that."- Participant 7

Male and Female Condoms

Male condoms were the most common form of birth control. However, only two participants are current and consistent users of condoms. The reasons for condom disuse varied by woman: five women are in committed or single-partner relationships and four women are not having sex. The remaining two women report using condoms only when they do not know the person they are engaging in sex very well.

The three current users of condoms mentioned that they favored using condoms because of the dual protection from unintended pregnancies and sexually transmitted illnesses. One single twenty-five-year-old mother was insistent upon condom use even though her only partner in the past five years is the father of her children. She states that she uses condoms with him now because they are no longer in a committed relationship, she does not want to contract a STI, and she does not want to have any more children.

Interviewee: "I just let him know, like. I just told him, "we ain't havin [sex], I don't wanna have more babies. I want to use these condoms when we have sex, like." First, he put up, like, an argument, like, "I don't know why we gotta use them, we ain't have been usin' them," like a lotta stuff. I tell him, you know, like, "it could be next door," you know? So, he's like, you know dudes. But, I'm the one who has to, has the vagina so I rule, so. "- Participant 3

Condom use is inconsistent among sexual partners in this study. Women reported using condoms at the beginning of relationships, but as the relationship developed over time, they would stop using them. All but one woman stated that they were less likely to use condoms in relationships they felt were exclusive or monogamous.

Interviewee: "Well one, I wanted to know if he even went to the doctor. Cause a LOOOOT of us don't. But he does. When is the last time he got tested for anything really, ya know? We talked about condoms. We did use them. After we kind of talked and we got into our sexual relationship, I guess, we stopped using them. And we talked about it of course. Yeah."- Participant 1

In an extreme case, one thirty-six-year-old woman fears the repercussions of asking her fifty-one-year-old fiancé to use condoms. The couple has been together eight years. She once asked him to use condoms and the request only introduced mistrust into the relationship. She currently does not use any form of contraception.

Interviewee: "Sometime, he know that I don't mess, sometime he know that I don't mess with nobody. So I let, no. I want to but, see... if we started using condoms he gonna think, 'oh well, well who you been messin' with?' You know what I'm sayin'? Cause I tried to bring condoms in the house before, he thought that I mess with somebody so I'm like, 'okay, we'll just keep doin it like this'... I sure don't be either [i'd] shoot myself to death or go to the 13th floor [Grady Mental Health Ward]. I can't handle that."- Participant 2

Interestingly, one 24-year-old woman's past use of condoms were only to prevent an

unintended pregnancy. She did not perceive herself at risk for STIs because she trusted her

partner. This participant has never used any other form of birth control method.

Interviewee: "Trying to prevent pregnancy 'cause with the ones I have slept with I didn't think they had diseases. So, I should be like, I should be cautious of stuff like that because um, I don't know, they could be telling me one thing but I don't know them fully." - Participant 4

Only one woman reported the use of female condoms. Although she is a current user of

male and female condoms, she prefers female condoms. She liked the autonomy that method

offers. She can initiate contraceptive use, guarantee that it is properly secured, and ensure she has

a steady supply. In addition, she sites that she likes that it offers more protection from STIs than

the male condom.

Interviewee: "It [female condom] doesn't break. 'Cause once, once I can feel it pop, like oh no, you got to pull out and then put on another one. So, I make sure that I'm safe. I don't care who I'm messing around with. I just, well I do care. Let me rephrase that. [laughs] I do care about who I'm having sex with and I care about the person's, I care about his reproductive system as well. And I don't want to harm anybody and I don't want nobody to harm me especially with STD... or pregnancy." - Participant 6

Discussion

The purpose of this research project was to explore women with SMI's contraceptive decisions in a metropolitan outpatient clinic in Georgia. The scope of this project included assessing current SRH attitudes, practices, and family planning desires. This analysis finds that there is a high-level of need for contraceptive use for this population. Nearly half of the women in this sample have had an unintended pregnancy, two-thirds of the sample are currently sexually active, and a third are current users of contraception. In addition, a majority of contraceptive use have moderate to low efficacy to prevent pregnancy. This is a concern because a vast majority of the sample wish to delay or prevent pregnancy.

Theoretical Frameworks

Many socioeconomic, systematic, and discriminatory factors contribute to SRH disparities for women with SMI. The Intersectionality Framework allowed for analysis of themes that overlapped with multiple identities that a participant discusses (Crenshaw, 1991; Bowleg, 2012). The women in this study were predominately of African-American descent and reported feeling stigmatized not only for their race, but their mental health diagnosis. Social perceptions have affected their self-esteem, relationships, and willingness or ability to access health care. Another notable intersection interfering with the ability to receive medical or mental health care was living with a SMI (symptoms interfering with cognitive functioning) and low socioeconomic status. Women discussed that SRH care is a low priority when they are struggling to find a place to live. Both the overlap of race and living with a SMI and socioeconomic status and living with a SMI have had negative effects on women's self-esteem, relationships and willingness or ability to access health care. These findings overlap with the qualitative interviews Borba et. al., (2012) conducted among women with SMI. The authors found that women discussed how their SMI symptoms, low socioeconomic resources, lack of social support, mistrust of providers, discrimination from healthcare providers interfered with their ability to access to quality mental and medical health services.

Using the Gelberg-Andersen Model for Vulnerable Populations, predisposing demographic factors in this population that serve as barriers or facilitators to contraceptive use are relationship status, homelessness, abuse and trauma, and substance abuse. The relationship between these factors is impacted by several enabling factors: financial resources, access to transportation, and social support to procure contraception. SRH care has been found to be the primary need factor for use of highly effective contraceptive methodologies. Findings from this study support the literature suggesting that women with SMI are not accessing SRH care at adequate levels (Happell et al., 2012; Hughes et al., 2016; Hughes & Gray, 2009; Matevosyan, 2009; McKinnon et al., 2002; Meade & Sikkema, 2005a; Rosenberg et al., 2001; Rothbard et al., 2015). Over half of the women in the sample have not received a well-woman exam in the past year. Reported barriers to SRH care were financial, transportation, lack of perceived need, and fear. These results reflect the financial and geographic separation of Grady Health Care (Druss & Newcomer, 2007).

A salient barrier to attendance of a well-woman exam included lack of resources. There seems to be a general lack of knowledge of resources that women with SMI may qualify to receive. First, Grady provides financial assistance to patients who demonstrate need for reduced services ("Billing, Insurance & Financial Assistance," 2010; Ford, 2016). Unfortunately, there is an extensive list of information that is needed to obtain the Grady Card—and participants report having trouble getting approval. The second funding mechanism is Title X funding for Family

Planning Services in Georgia (Dunlop, Adams, Hawley, Blake, & Joski, 2016). Under Title X, many low-income women with SMI may be eligible for waivers at nearby Federally Qualified Health Centers. Dunlop, et. al., (2016) have demonstrated a significant increase in utilization of LARC methodology and other higher effective forms of contraception among low-income women who received the waiver from 2009—2013 when compared to those without insurance. The third option is that Grady has a physician within the Behavioral Outpatient Center who conducts well-women exams for women without access to other options (Ford, 2016). It is currently unknown if other psychiatrists at Grady or the Emergency Room know of the SRH services that this physician provides (Martha Ward, 2017). Unfortunately, appointments with this physician are limited; therefore, the first two options are more feasible suggestions for patients at Grady Behavioral Outpatient Center.

Nearly all women who have received their annual exam are using some form of more effective contraception and a majority of these women are mothers. This could be due to the fact that these women have received adequate family planning services after a previous pregnancy. Also, it can be attributed to women who prioritize their SRH are more proactive about using some form of contraception to prevent an unintended pregnancy.

Highly Effective Contraceptive Methods

A majority of women knew about a variety of highly effective contraceptive methods. However, the prevalence of current and effective contraceptive use among sexually active individuals remained low.

Celibacy, or abstaining from sex, was the most popular method of current birth control in this sample. Women reported that they did not want to be in a sexual relationship while they are trying to manage their mental illness. If an individual has the freedom or self-efficacy to abstain from sex, it is an extremely effective form of birth control (Centers for Disease Control and Prevention, n.d.). Although they are not currently sexually active, there is a need for SRH discussions because women with SMI are at an increased risk for sexual violence and trauma (McKinnon et al., 2002; Meade & Sikkema, 2005a; Miller, 1997; Weinhardt et al., 1999).

The single IUD user got the device inserted soon after her fourth pregnancy. Barriers to contraceptive uptake of LARC methods could be that the procedure itself seems too invasive or that it requires an appointment for physician placement and removal (Curtis, 2016; Hatcher et al., 2004; Xiang, 2015). A non-user (Participant 4) of LARCs method commented, *"I don't want to do that [get an IUD]. [Chuckles] That seems painful."* In addition, several women had misconceptions about returned fertility, and LARC methods.

For women with SMI, female sterilization may not be a feasible option due to ethical, financial, or legal constraints (Pollack, 2005). The US medical community has had a history of forced sterilizations of minorities, incarcerated individuals, and women with SMI (Pollack, 2005). As a result, the federal and state policies for Medicaid have several strict requirements to pay for sterilization services (42 CFR § **441.258**). One requirement, the need for mental competence, is subjective to the provider and the judicial system.

Only one woman reported using a permanent method. The twenty-one-year-old woman in this sample did not regret undergoing sterilization at an early age. This finding is contrary to Curtis, (Curtis, Mohllajee, & Peterson, 2006) that have found women under the age of thirty are twice as likely as women over thirty to express regret over their decision to undergo female sterilization. These women were also 8 times more likely to undergo reversal or evaluation for IVF. An additional participant is contemplating female sterilization. The two women remark that they are struggling to manage the children that they currently have and their mental health conditions.

Similar to previous literature, this study found high rates of discontinuance among SARC users (Berenson et al., 2011; Centers for Disease Control and Prevention, 2011; Draper et al., 2006; Hatcher et al., 2004; Hubacher et al., 1999; Paul et al., 1997; Vaughan et al., 2008). All women who tried injectable contraceptives discontinued the method. Current recommendations for injectable contraception is one shot every three months (Curtis, 2016; Hatcher et al., 2004). Women reported that they had trouble going to scheduled appointments. In addition, they did not like the disruption of their menstrual cycle or associated weight gain.

The birth control pill was the second most common form of contraception. For these women, it was often the first prescribed form of birth control that they used. The main reason for cessation was forgetting to take the pill as prescribed. In line with prior research, women in this study discontinued oral contraception at high rates (Hall et al., 2012). Interestingly, reasons for stopping birth control among women in this study were complaints about physical side effects of oral contraception and not emotional side effects as previous literature suggests (Centers for Disease Control and Prevention, 2011; Crawford, 2002; Dutton & Foldvary-Schaefer, 2008; Gaffield et al., 2011; Hall, Steinberg, et al., 2014).

Similar to the birth control pill, the contraceptive patch and ring are female-controlled (Centers for Disease Control and Prevention, n.d.; Farr et al., 2011; Hatcher et al., 2004). However, users in this sample cited that they had trouble adhering to the recommendations. Women wanted more convenient forms of birth control.

Less Effective Contraceptive Methods

Male and female condoms were the only two methods mentioned that had lower efficacy against pregnancy prevention. All women report past-history of condom use, however only three are current users of condoms. Among all women, there were reports of inconsistent condom use. Women reported having unwanted unprotected sex because it is a behavior that requires two partner participation (Smith, 2003). Many women reported cessation of condom usage with partners that they have been in a relationship they believed to be monogamous (Salazar et al., 2004; Shain et al., 1999). In extreme instances, participants feared the repercussions, such as physical violence, if they asked to use condoms again.

Previous studies suggest that inability or fear of condom negotiation begins at an early age among minority women (Brooks-Gunn & Furstenberg Jr, 1989). Young African-American women are more likely to report having unwanted unprotected sex than their White counterparts (Brooks-Gunn & Furstenberg Jr, 1989). Effective ethnocentric strategies have been explored for increasing the ability to negotiate condom use minority populations (Salazar et al., 2004). Previous studies have found interventions that allow women to practice assertiveness which is helpful in situations where there is a power imbalance (Hall, Steinberg, et al., 2014; Hobkirk et al., 2015). These methods may be adapted for the adult-female minority population with SMI at Grady Behavioral Outpatient Center.

The findings from this study support that there is a SRH knowledge and health care gap among women with SMI. The current Centers for Disease Control and Prevention recommendation is for dual-protection which is pairing a highly effective pregnancy prevention method such as the implant with condoms to prevent STI prevention (Centers for Disease Control and Prevention, n.d.). However, none of the women reported this safer sex behavior.

Strengths and Limitations

This study had several strengths. The racial demographics of this study population was similar to the overall patient population at Grady Behavioral Outpatient Center services. Minority women with SMI were able to share their personal experiences with contraceptive use, sexual satisfaction, and SRH care. The use of the Gelberg-Andersen Model and the Intersectionality Framework allowed for their responses to be analyzed with careful consideration to cultural factors that have a differential impact on marginalized groups. The flexibility in the semi-structured interviews allowed for deeper discussion surrounding unexpected themes.

This study is subject to several limitations. The first is that a nonprobability convenience sampling method was used (Etikan, Musa, & Alkassim, 2016). The small sample chosen may not be representative of all the experiences of women with SMI at the Behavioral Outpatient Health Center, in Atlanta, or in the country. The women recruited had similar backgrounds. It is important to note that the three Asian participants are derived from three distinct cultures (Indonesian, Nepalese, and Asian-American). This could be due to the "snowball" sampling method selected.

An additional limitation of this study is the self-report of major variables such as diagnosis of SMI, STI status, unintended pregnancy, abortion, gynecological history, and sexual history. These variables are based on self-report and not a clinical examination or medical record confirmation. For example, over half of the women reported receiving a STI test in the past, however none reported having an STI. It is important to note that this study is exploratory and will provide information about the SRH experiences and practices of women with SMI. An additional quantitative assessment such as a medical chart review would substantiate use of SRH services, abortion rates, STI rates, and distribution of SMI.

Public Health Implications and Recommendations

To date, this is the first study to have used the Gelberg-Andersen Model for Vulnerable Populations and the Intersectionality Framework to guide qualitative discussions and analysis of contraceptive decisions among women with SMI. Based on these results, there is a need for more education about effective contraceptive options, STI prevention, and family planning in this population. In line with previous research, women in this sample indicate that the only physician that they regularly visit is their mental health care provider (Brunette et al., 2003; Druss et al., 2011; Hert et al., 2011). Unfortunately, Grady Outpatient Behavioral Health Center psychiatrists have reported that they do not have enough time to ask adequate questions or give comprehensive education about SRH needs for their female patients of reproductive-age (Philip, 2016). This leaves this vulnerable population without adequate SRH knowledge about their risks and ultimately can result in under-utilization of SRH services. There are several multi-level interventions/ recommendations that can fill this SRH gap for women with SMI.

First, studies have pointed to the lack of communication between mental health care providers and primary or medical providers about reproductive health topics for women with SMI (Druss & Newcomer, 2007). Psychiatrists at Grady Outpatient Behavioral Center are in a unique position to improve sexual and reproductive health care for their female patients. Previous research has shown that a psychiatrist referral for comprehensive SRH services has been an enabling factor for SRH service utilization (Druss, 2006; Ford, 2016). Independent of this research, a training in SRH care for psychiatry residents at Grady has been instituted to address the SRH gap. This training includes an overview of SRH for women, opportunities to practice SRH conversations with peers, and a take-home psychiatrist toolkit to guide SRH care during appointments. This SRH training needs to be expanded and adapted to include other mental health care professionals such as nurses and support staff to increase knowledge about the SRH risks for this population and empower mental health practitioners to refer women with SMI to reproductive health services.

Second, an institutional-level change is recommended to reinforce the psychiatrists SRH training. A built-in reminder, similar to those for chronic and infectious disease questions, can be implemented in Grady's Electronic Medical Record System (EPIC) (Philip, 2016). The social history tab in the patient navigator can be expanded to include standard questions about SRH concerns (i.e. family planning goals, contraception, sexual partner-change, etc.), and provide a place to indicate whether or not the psychiatrist referred the reproductive-aged patient for a women's wellness exam. This can increase care coordination between psychiatry and primary care physicians.

Third, a training using trauma-informed care needs to be developed for gynecological staff who interact with patients with SMI. Several women in this study reported fear of invasive gynecological exams. Health care professionals can unknowingly traumatize (or re-traumatize) patients that are victims of sexual abuse or assault (Robohm & Buttenheim, 1997). This training can focus on ensuring that women with SMI are exposed to the full-range of contraceptive options in a manner that is easily comprehendible (Yee & Simon, 2014). Continual tests for

understanding and consistent follow-up are essential to providing quality family planning counseling with this population (Druss & Newcomer, 2007; Maj, 2009).

Fourth, a comprehensive SRH curriculum can be implemented at the individual level to expose women with SMI to the importance of SRH care. This curriculum can be implemented within the small-group wellness circles that Grady Outpatient Behavioral Health Center has currently in-place. The SRH curriculum will inform reproductive-aged women of their contraceptive options. It can also allow women to think through difficult family planning decisions, learn and demonstrate condom negation skills, and provide resources on how to schedule a women's wellness exam. The curriculum can be implemented by trained Grady peereducators or masters' level students.

Fifth, Grady Behavioral Outpatient Center can recruit or employ SRH "champions" to serve as in-house sources of SRH knowledge for reproductive-aged women with SMI. These individuals can be trained Grady physicians/ practitioners, Masters' of Public Health students, and/or Grady Peer-Educators who serve as trained sexual and reproductive health experts that can answer questions and help individuals make SRH care appointments. Previous research has shown that case-managers or peer-navigators have been successful in encouraging and aiding patients with SMI to access medical health care (Druss, 2006).

Conclusions

This study presents a unique contribution to the literature on contraceptive use among women with SMI. It is the first to apply two public health theories to health disparities faced by reproductive-aged women with SMI. The Gelberg-Andersen Model for Vulnerable Populations along with the Intersectionality Framework provide a useful foundation for understanding the patient reported barriers and facilitators to contraceptive use found in this data. There are a variety of intrapersonal, interpersonal, and systematic barriers that prevent women with SMI from accessing more effective forms of contraception.

The World Health Organization declares access to evidence-based family planning services are a universal right. It should be the women's decision if or when to have children, to prevent unintended pregnancies, or to have safe termination options (World Health Organization, 2016). The reproductive health care needs of women with SMI are complex. The SRH intervention must be multi-dimensional: individual, physician/ provider, and institutional levels. Recommendations include the development of a comprehensive SRH curriculum, employing "SRH expert(s)" within the Outpatient Center, mental and SRH health care provider trainings, and setting up an electronic recurring reminder for SRH referral for psychiatric patients. These recommendations attempt to improve the integration of SRH and mental health services within the Grady Hospital network.

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42 CFR § 441.258.

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Appendix A: Patient Interview Guide

Survey ID:	
Date:	
Start Time:	
End Time:	

Research Question:

What are the sexual and reproductive health experiences of reproductive age women with severe mental illness who utilize the services at the Grady Behavioral Outpatient Center?

Study Population: Women of reproductive age ranging from 18 to 44 years with severe mental illness

Introduction:

Hello! My name is _______. I am a graduate student from Rollins School of Public Health at Emory University. We are interviewing patients from this clinic to better understand how to help them access sexual and reproductive health services. The information we collect will be used to create educational materials for healthcare providers so that they can better serve patients' needs in the future. Your participation in this study will be greatly appreciated. We would like to know *your* feelings, beliefs and experiences concerning your sexual and reproductive health while receiving care at Grady.

If you agree to participate in this study feel free to stop whenever you want to and if any question makes you uncomfortable you do not have to answer it. I would also like you to know that any information that you share with us will only be used for the purposes of this study and no one will ever know what you shared. I would also like to tape record our conversation since I do not want to miss any important information that you share.

Once again, this interview is <u>completely confidential</u> and no one other than the people associated with the project will hear the tape recording. Do I have permission to tape record our discussion today? (wait for response). I have a list of topics that I would like us to talk about so feel free to bring up anything that is of concern to you. Do you have any questions or comments before we begin? Great, let's get started!

Warm-Up Questions

Thank you for participating today and for being willing to participate in this session.

- Tell me a little bit about yourself.
 - What is your age?
 - How do you identify race/ethnicity?
 - Do you currently have children?

- $\checkmark \qquad \text{If yes, how old are they?}$
- How old were you when you received your diagnosis?

Quality and Access to Care at Grady

I would now like to talk about the quality and access to care at Grady hospital.

- Tell me about your healthcare history with Grady.
 - When did you begin using Grady?
 - + What services do you use at Grady?
 - What do you do when you need to see a doctor?
 - What else would you like to say about that?
- Have you seen a primary care physician in the past year?
- What has been your experience communicating about your sexual/reproductive health with your primary care physician?
 - + What has your primary care doctor done well?
 - What can your primary care doctor do to improve?
 - What medications are you currently using (i.e. anti-depressants, anti-psychotics, etc.)
 - Did your doctor tell you the side effects of your medications?
 - What else would you like to say about that?
- What has been your experience communicating about your sexual/reproductive health with your mental health provider?
 - What has your mental health provider doctor done well?
 - What can your mental health provider do to improve?
 - What else would you like to say about that?

Services Received at Grady

I would like to ask you questions about receiving services at Grady hospital.

- When did you first start coming to Grady for health services?
- What has been your experience with receiving health services at Grady?
 - sexual/ reproductive health services, ask them to explain more on each experience they mention
 - What else would you like to say about that?
- What are your main concerns about your reproductive health?

Sexual/Reproductive Health and Personal Relationships

I would now like to ask you questions about your sexual/reproductive health.

- What reproductive health services have you received?
 - May potentially mention (Pap Smears, STIs, Pregnancy testing)
 - \checkmark If yes, how was the experience? Would you be willing to get another one?

- ✓ If no services received, ask about the reasons for not getting reproductive health care
- ✓ What else would you like to say about that?
- Tell me about your family: What are your plans about having a family?
 - Are you currently using a form of birth control (birth control, i.e. IUD, Pills, etc.)?
 - What types of contraception have you used before? How long did you use that method?
 - ✓ If stopped, why did you stop using that form of birth control?
 - What do you do when you need contraception?
 - Have you talked about contraceptive use with your provider (e.g. mental health, primary care). If yes, how was the experience?
 - ✓ If she mentions children ask about birth spacing. How old is/are the child/children if more than 1.
 - Did you talk about birth spacing with your primary care provider? How was the experience.
 - This is a personal question. Have you ever had an abortion?
 - \checkmark If yes, would you like to discuss what led to that decision?
 - ✓ Where did you go for services?
 - ✓ Did you talk to your primary or mental health care provider before making that decision?
 - Did you know that your psychiatrist can prescribe birth control?
 - ✓ Would you allow them to?
 - ✓ Would you like to talk to your psychiatrist about birth spacing?
 - What else would you like to say about that?

Sexual Satisfaction and Safe-Sex

We are now going to switch into a more sensitive topic. I would now like to ask you questions about your sex life.

- Can you tell me an estimate of how many male sexual partners you have had? Female partners?
- Can you describe your current sexual relationship?
 - What type of relationship are you in?
 - How many sexual partners are you involved with? Tell me about those relationships.
 - What else would you like to say about that?
- What do you and your partner talk about protecting yourself from sexually transmitted diseases?

- Contraception negotiation with your partner.
- Which partner makes the decision on contraceptive use?
- What else would you like to say about that?
- This question is very sensitive in nature. Have you ever had a negative sexual experiences in the past?
 - What types of health services did you seek after your experience?
 - How soon did you seek those services after the experience?
 - What else would you like to say about that?
- What are some of the benefits of having sex?
 - Satisfaction in your sex life?
 - What do you enjoy about your sex life?
 - What else would you like to say about that?

Closing Section

We are reaching the end of our interview.

- What other things would you like to share with me about your sexual/reproductive health?
- What questions do you have for me?

We have come to the end of our session. I encourage you to discuss some of the things that you have shared with me today with the physicians at Grady, Park Place. I would also like to leave you with the Mental Health Crisis Hotline Number in case you need it in the future! Thank you so much for taking the time out of your day to interview with me.

Resource Guide

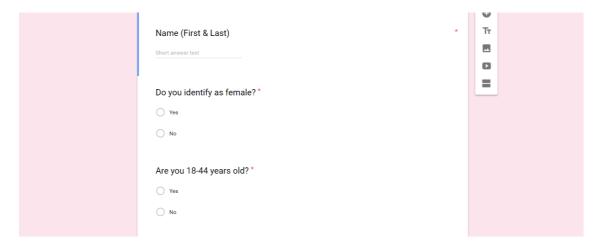
Mental Health Crisis Hotline Number 1 (800) 715-4225

Appendix B: Pre-Screening Questionnaire

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Figure 8. Part 2: Screenshot of Pre-Screening Questionnaire Recruitment Tool taken (4/14/2017)



	O	0
Have you been diagnosed with the following: *	Tr	
Bipolar Disorder		
Cognitive Disorder	0	
Major Depression	-	
Personality Disorder		
Post Trumatic Stress Disorder (PTSD)		
Severe Anxiety Disorder		
Other		
Cell Phone Number *		
Long answer text		

Figure 9. Part 3: Screenshot of Pre-Screening Questionnaire Recruitment Tool taken (4/14/2017)

Figure 10. Part 4: Screenshot of Pre-Screening Questionnaire Recruitment Tool taken (4/14/2017)

Who does this number belong to? *	О Тт	
Can someone from the project (check all that apply): *	0	
Call Voicemail		
Other Phone Number		
Short answer text		
Who does this number belong to?		

Figure 10. Part 5: Screenshot of Pre-Screening Questionnaire Recruitment Tool taken (4/14/2017)

	=
Can someone from the project (check all that apply):	
Call	
Voicemail	
Text	
Email	
Short answer text	