EMPOWERING WOMEN THROUGH RECOVERY: DEVELOPING EDUCATIONAL GROUP SESSIONS ON THE EFFECTS OF MATERNAL ADDICTION ON CHILDREN

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University of Pittsburgh, 2012

Maternal addiction is a chronic, complex disease which has become an increasing problem across the United States. These women not only have unique needs as women suffering from addiction, but also as mothers. This population faces barriers to treatment, such as lack of child care and a greater prevalence of mental health issues. Integrated treatment programs attempt to meet the unique needs of this population by addressing their barriers, incorporating the mother's physical, social, and mental health needs into the recovery plan, and responding to the children's needs. Sojourner House, an example of an integrated treatment program, is a faith-based, in-patient residential drug and alcohol treatment facility for women and their children in the Garfield neighborhood of Pittsburgh, Pennsylvania.

Different types of groups, such as educational sessions, are used in treatment programs to discuss various information, allowing participants to gain information while improving their interpersonal skills. When appropriate, written materials can be used to supplement the content of an educational group. The current project began when two graduate students were placed at Sojourner House and tasked with developing a project based on the needs of the site and the site's residents. The students developed and led four weekly group sessions around the effects of maternal addiction on children and created a complementary pamphlet. Several challenges arose during the implementation, mainly revolving around the residents' attendance and emotional states.

Developing a group based on the expressed needs of the residents appeared to be successful, based on the residents' response to the sessions. This project has public health significance because educational groups are needed to teach recovering mothers how maternal addiction affects children, and the resident-centered design of the group focuses on meeting the residents' needs. Sojourner House staff should continue to hold the students' group sessions as needed with new residents. If the students' group does not meet the needs of future residents, the staff should strive to create a group based on their needs to show that their ideas matter and to foster feelings of importance and self-worth amongst the residents.

TABLE OF CONTENTS

PREFACE IX

1.0 INTRODUCTION 1

2.0 BACKGROUND 4

2.1 MATERNAL ADDICTION 7

2.1.1 Parenting and the Children of Maternal Addiction 8

2.1.2 Treatment 12

2.2 SOJOURNER HOUSE 14

3.0 DEVELOPMENT OF EDUCATIONAL GROUPS AND WRITTEN MATERIALS 18

3.1 EDUCATIONAL GROUPS: DEVELOPING AND LEADING 18

3.1.1 How to Effectively Lead Group Sessions 21

3.2 WRITTEN EDUCATIONAL MATERIALS 22

4.0 PROJECT DEVELOPMENT AND IMPLEMENTATION 25

4.1 THE BEGINNING 25

4.2 DEVELOPMENT AND IMPLEMENTATION OF THE WEEKLY GROUP SESSIONS AND PAMPHLET 27

4.2.1 Week One: Exploration 28

4.2.2 Week Two: Possible Physical Features of Babies Exposed to Drugs/Alcohol in Utero 32
4.2.3 Week Three: Possible Behavioral Features of Children Affected by Maternal Addiction 36
4.2.4 Week Four: Stress Relief 41
4.2.5 Pamphlet 43
4.2.6 Sustainability 44
5.0 DISCUSSION 46
5.1 CHALLENGES AND LESSONS LEARNED 52
6.0 CONCLUSION 56
6.1 THESIS SUMMARY 56
6.2 LIMITATIONS 59
6.3 FINAL THOUGHTS 60
APPENDIX A: WEEKLY GROUP SESSION OUTLINES 63
APPENDIX B: WEEK TWO HANDOUT 69
APPENDIX C: FIGURES OF THE PAMPHLET 70
BIBLIOGRAPHY 74

LIST OF FIGURES

Figure 1: Example of pamphlet cover page 71

Figure 2: Example of the inside pages of the pamphlet 72

Figure 3: Example of the back page of the pamphlet 73

PREFACE

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Thank you to Ms. Sharon Jones and the staff at Sojourner House for making me feel welcome during the summer and taking time out of their hectic schedules to always answer my questions and give advice.

To my friends, thank you for putting up with me over the past few months, I know it could not have been easy. The continual encouragement along the way meant the world to me.

Without the overwhelming support and encouragement of my family, I would not be where I am today. My experiences at Sojourner House reminded me how fortunate I am to have

parents who unwaveringly believe in me and what I am capable of, even when I find it difficult myself. Thank you from the bottom of my heart.

1.0 INTRODUCTION

Addiction is a chronic, multifaceted disease that affects individuals from all walks of life, with the actual use of the substance making up only one part of the disease spectrum.[1] Addiction is hard to define, but the key concepts of a loss of control over the use of the substance and continued use despite experiencing negative consequences are used to help build a definition.[1, 2] A change in brain function seen by tolerance, withdrawal, and loss of control is also an important aspect of addiction.[1] For those suffering from addiction, use of the substance consumes their life, coming before family, work, and other responsibilities.[1] In 2011 8% (20.6 million) of the population aged 12 or older suffered from substance addiction, also referred to as dependence, or abuse in the previous year.[3] Of the 20.6 million, 2.6 million suffered dependence on or abuse of both alcohol and illicit drugs, 3.9 million only illicit drugs, and 14.1 million only alcohol.[3] The National Survey on Drug Use and Health (NSDUH) includes nine categories of illicit drugs which are marijuana, cocaine, heroin, hallucinogens, inhalants, and nonmedical use of prescription-type pain relievers, tranquilizers, stimulants, and sedatives.[3] Nonmedical use is defined as "use without a prescription of the individual's own or simply for the experience or feeling the drugs cause" (p. 13).[3]

The rates of substance use are important to consider because there is a typical progression seen in the movement from use to addiction. The NSDUH estimates found that in 2009 illicit drug use rose to the highest level since 2002 at 8.7% of Americans aged 12 or older, and rates

continued to rise in 2010 to 8.9%.[4] In 2011 the level of illicit drug use was similar to that of 2009 and 2010 at 8.7% of the population aged 12 or older (22.5 million people).[3] The rate of illicit drug use in 2011 was highest among young adults aged 18 to 25 at 21.4%.[3] The rates of alcohol consumption for the population aged 12 or older were 22.6% for binge drinking (five or more drinks on the same occasion at least once in the past 30 days) and 6.2% for heavy drinking (five or more drinks on the same occasion on at least five days of the past 30).[3]

While dependence and abuse rose to and have remained at higher levels in the past few years, in 2011 only 10.8% of people aged 12 or older who needed treatment for illicit drugs or alcohol received it in a specialty facility (in-patient hospital, in-patient or outpatient rehabilitation facility, or mental health centers).[3] Addiction is a relapsing disorder, which may require an individual to go through multiple treatment experiences before being successful in recovery.[5] Also, addiction is a life-long disease requiring individuals to maintain their recovery for life.[5]

Different populations suffering from the disease of addiction have their own unique needs. Women, specifically mothers, suffering from addiction are one example. Taking the unique needs of this population into consideration, such as child care and histories of physical/sexual abuse, standard treatment programs may not be effective as they typically do not focus on meeting those needs. Drug and alcohol rehabilitation treatment programs need to meet the needs of their participants. If participants' needs are not met, they are less likely to complete the program and complete the program successfully. Some integrated treatment programs are specifically designed to meet the needs of mothers by combining different services such as a recovery program and child care. Sojourner House, located in the Garfield neighborhood of Pittsburgh, Pennsylvania, is an example of one such integrated treatment program.

Through the Bridging the Gaps (BTG) internship program, two University of Pittsburgh graduate students were placed at Sojourner House, a faith-based, in-patient residential treatment facility for women and their children, and tasked with developing a sustainable project based on the needs of the site and the site's residents. After nearly three weeks of observation and informal discussion, the students decided to develop and lead four weekly group sessions on the effects that maternal addiction can have on children. The students also developed a complementary pamphlet. The topics for the weekly sessions were the exploration of residents' pregnancy experiences, possible physical features of babies exposed to drugs/alcohol in utero, possible behavioral features of children affected by maternal addiction, and stress relief. The complementary pamphlet contained information selected from the weekly group sessions and a section outlining additional resources for children's programs in the Pittsburgh area.

This thesis covers the project developed by the student team placed at Sojourner House in the summer of 2012 through BTG. The thesis follows the project from the initial idea through its development and implementation. Chapter Two discusses addiction in women and mothers as well as the advantages integrated treatment options offer. The chapter also goes into detail about Sojourner House. Chapter Three presents how to develop educational groups and written education materials based on the literature, as well as how to lead groups. Chapter Four describes the development and implementation of the sessions and the pamphlet. The sustainability of the weekly group sessions and pamphlet is also discussed in this chapter. Chapter Five discusses the sessions based on the literature and residents' responses. This chapter includes challenges the students faced and lessons learned as well. Chapter Six concludes this thesis with a summary and the limitations of the project. This chapter also discusses the importance of programs such as Sojourner House and the continued use of the students' project or similarly developed groups.

2.0 BACKGROUND

Addiction is a complicated, multifaceted disease with biological, physiological, psychological, and behavioral aspects.[1] The actual use of the addicting substance makes up only one part of the disease spectrum.[1] Two key concepts used to help define addiction are a loss of control over the use of the substance and continued use despite experiencing negative consequences.[1, 2] Often the words abuse and addiction are used interchangeably by those not in addiction professions; however, the two terms are not the same. Substance abuse occurs when substance use continues despite experiencing negative consequences, interferes with important obligations (eg. poor work performance or repeat absences due to substance use), and causes visible distress or significant impairment in functioning.[1] Addiction occurs when the criteria for substance abuse are met and when physiological dependence, indicated by tolerance and withdrawal, and a loss of control seen by multiple unsuccessful attempts to stop or reduce use are present.[1] Tolerance, withdrawal, and loss of control indicate a change in the way the brain is functioning (brain dysfunction), which is another important aspect of addiction.[1] Often, those who meet the conditions for substance abuse are at high risk for developing addiction.[1]

There is a typical progression from substance use to abuse to addiction. Some people use a substance and experience minor consequences, after which they stop or limit and control their future use of the substance.[1, 2] Others will use a substance periodically or casually with some continuing this behavior indefinitely, as long as it does not result in uncomfortable

consequences.[1] At this point, these individuals are still able to maintain control.[1] Those who continue to use the substance increase the amount they use and begin experiencing more negative consequences, moving from use to abuse.[1] This is normally the point where the substance is being used more for its pharmacological effects.[1] In some cases, people regain control and abstain after experiencing more severe consequences, such as legal or behavioral problems related to their substance use.[1] Others continue to use frequently despite recurring and increasingly severe consequences, showing no control over their substance use.[1] These people have moved beyond substance abuse and into addiction.[1] At this stage, substance use has become the focal point of their lives, making their addiction more important than other aspects of life such as relationships, jobs, and responsibilities.[1] Additionally, those suffering from addiction are prone to distortions of thinking; the most common form is denial.[2] They can deny that a drug problem exists, that the problem is severe, that they need help, and that the negative consequences they experience are due to their substance use.[2]

Some factors that affect the movement from use to abuse to addiction are genetic predispositions to developing addiction and the "addictiveness" of particular substances.[1] Individuals with a genetic predisposition may move more quickly from use to addiction.[1] Use of highly addictive substances such as heroin or cocaine also results in quicker development of addiction, regardless of genetic traits.[1] Addiction is considered a chronic, relapsing disorder.[5] An individual may not achieve recovery after one treatment experience but need multiple treatment experiences. The disease of addiction is life-long, and once in recovery individuals need to maintain their recovery for life, much like the maintenance of other chronic conditions such as asthma, hypertension, or diabetes.[5]

Addiction and abuse affect individuals from all walks of life; however, lower education attainment, unemployment, and being male are associated with higher rates of dependence or abuse.[3] The percentage of males aged 12 or older suffering from substance dependence or abuse in 2011 was 10.4%, nearly twice that of females (5.7%).[3] Women differ from men in their substance dependence or abuse and the issues surrounding their dependence or abuse.[5] Women are more likely to start using due to a traumatic life event such as physical or sexual abuse, a sudden physical illness, an accident, or a disruption in family life.[5, 6] Women are also more likely to have been raised in heavy drinking or drug abuse environments[5-11], come from dysfunctional families[5, 7, 8], initiate use due to a partner's use[5, 6, 12, 13], inject drugs[5, 6], and exchange sex for money or drugs[5, 6]. Women enter dependent relationships more frequently than men, which may prevent them from performing basic life-skills, such as managing money.[5] Also, women are more likely to abuse multiple substances[6, 14] and progress from substance use to abuse and addiction more quickly than men[6, 9, 12, 14]. Regarding alcohol, the time between the age of the first drink and treatment-seeking is usually shorter for women, and they move between the landmarks associated with alcoholism development faster.[6, 12, 15] Researchers refer to this as telescoping, which means there is a faster progression from the first use to addiction and a more rapid course of addiction.[6, 9, 10, 15] Telescoping can occur with substances other than alcohol such as opioids and cannabis.[10] Compared to men, women drug users get sicker faster and experience higher rates of liver problems, hypertension, anemia, and gastrointestinal disorders.[6]

Because statistics rely heavily on patient disclosure, the exact number of drug-dependent women is unknown as women fear stigmatization and discrimination.[16] Estimates show that of American women aged 15-44, up to 15% abuse alcohol or illicit drugs[17], and of all drug-dependent women, nearly 90% are of childbearing age.[16] Women suffering from addiction have

a unique set of risk factors and needs that separate them from their male counterparts. Some of these risk factors and needs include a greater vulnerability to adverse physiological consequences[6, 8, 10, 18, 19], greater prevalence of mental health problems[5-8, 10, 11, 13-15, 17-26], histories of physical or sexual abuse[5-8, 10, 11, 13, 15, 17-24], serious medical problems[5, 8, 14, 15, 18, 19, 22], poor nutrition[18, 19, 22], relationship problems[6, 18, 19, 22], lack of employment skills[13, 22], inadequate housing[11, 22], and deficits in social support[7, 8, 18, 19, 21, 22]. Women entering treatment were found to be younger, have lower education levels[10, 11, 13, 22], have higher unemployment[13, 23], and have more concern about issues related to children than men.[5, 6] In addition, substance dependence or abuse puts women at higher risk for infertility, vaginal infections, repeat miscarriages, and premature delivery.[6]

2.1 MATERNAL ADDICTION

Maternal addiction is an increasing problem across the United States and a serious issue affecting parenting.[19, 21, 25] Of the adults in substance abuse programs in the United States, 59% are parents (over one million out of the 1.84 million in treatment), and 27% of those parents in treatment have had at least one child removed by child welfare services.[18] According to estimates, 50-80% of child welfare cases involve a parent who abuses alcohol or other drugs, with the majority of those parents being mothers.[18, 19] Estimates show that 70% of children with parents suffering from addiction are raised by single-parent mothers with substance use problems.[25] Up to 70% of women in substance abuse treatment are mothers of dependent children[15, 19], and typically fewer than half lived with all of their children prior to entering

treatment, with up to one-third having lost parental rights to at least one child.[5] These women not only have unique needs as women suffering from addiction, but also as mothers.[6, 19]

2.1.1 Parenting and the Children of Maternal Addiction

Mothers suffering from addiction may have problems parenting.[19, 22, 27, 28] These problems can arise because of placing the importance of satisfying their addiction before that of their own and their child's welfare, the emotional imbalance associated with intoxication or withdrawal, impairment from chronic drug use, and the resulting emotional unavailability to their children.[19] Other challenges limiting the parenting ability of mothers suffering from addiction are a familial history of abuse, legal problems, physical and mental health conditions, and lack of a social support, especially from non-drug-involved individuals.[17] Additionally, these mothers often lack a suitable parenting role model, due to their experiences as children, which affects their own parenting abilities.[5, 11, 28]

Mothers suffering from addiction may have difficulties providing stable, nurturing environments for their children due in part to their addiction but also difficult life circumstances, such as severe economic and social problems, often brought on by their addiction and addictive behaviors.[18, 19, 22, 27] While mothers suffering from addiction care about their children and attempt to minimize the impact their drug use has on them, they are often lacking in empathetic awareness of children's needs.[21, 25] Also, mothers suffering from addiction may overestimate infant physical development[21] and lack understanding of basic child development issues.[28] Strathearn and Mayes reported that cocaine-addicted mothers with children aged six months to three years were likely to give inappropriate instructions or commands considering the child's developmental age.[28] Mothers with substance dependency are often less sensitive in interacting

with their children[11, 26, 28], less emotionally engaged[11, 26-28], less attentive and flexible[11, 26, 28], experience less pleasure in interacting with their child[11, 26, 28], and show more intrusive behaviors[11, 26-28]. Also, mothers suffering from addiction tend to have a reduced capacity to read an infant's cues and a reduced tolerance for dealing with a distressed and difficult-to-soothe infant, causing the mother to withdraw from interaction.[11, 26, 28] Opiate or cocaine-addicted mothers' parenting styles may fluctuate between authoritarian over-control and excessive permissiveness.[27, 28] Parental substance abuse or dependency is linked to impaired infant-parent interactions, harsh parenting characterized by excessive control and punishment[27], child neglect[27], decreased levels of monitoring and supervision[25], parent-child conflict, perception of less parental warmth, and inconsistent discipline[25, 27].[29] With opiate-addicted mothers, inconsistent discipline or setting limits may be attributed to the mother's perceptions of her child's maladaptive behaviors.[27] Role reversal is common in the relationship between parents suffering from addiction and their children.[25, 28] The child becomes the adult in the relationship, a role he/she is often not developed enough to fill.[25] Addressing parenting in substance abuse treatment programs is important because parenting outcomes affect child outcomes.[19, 26]

Maternal addiction affects childhood health and development, beginning in utero and continuing through childhood via the effect it has on a child's environment.[22] Use of substances during pregnancy is a serious public health concern.[30] According to estimates, one in four pregnant women aged 15 to 44 used substances in the past 30 days.[30] Children exposed to drugs/alcohol in utero are at greater risk for prematurity, impaired physical growth and development, physical, mental health, and behavioral problems, and learning disabilities.[18, 22] In utero exposure to substances is also associated with increased occurrences of perinatal morbidity, lower birth weight, and decreased estimated gestational age.[31] Drug use during pregnancy can

also result in neonatal abstinence syndrome or withdrawal syndrome in newborns.[22] Fifty-five to 94% of newborns with in utero exposure to opiates develop withdrawal symptoms.[22] Infants exposed in utero typically have an impaired ability to regulate states of wakefulness, sleep, or distress and need more parental help.[11, 26, 28] Instead of increasing readiness to interact with age, cocaine-exposed infants exhibit less readiness to interact with the mother at six months of age compared to three months.[28] Children who were exposed to substances in utero tend to show less positive emotion when interacting with the mother, more distress in new situations, slower recovery from interruptions, impaired response to stress, and weakened ability to stay in an alert, attentive state.[11, 28] Children exposed to heroin in utero exhibit behavioral problems such as inattention, hyperactivity, aggressiveness, and lack of social inhibition, particularly at school age.[32]

Mothers suffering from addiction could also put their child at risk of developmental problems by creating a chaotic and unstable home environment.[33, 34] Growing up in an environment created by maternal addiction puts children at risk for negative biological, developmental, or behavioral outcomes, including developing their own substance abuse problems.[17, 18, 25, 29] The children of cocaine-addicted mothers tended to ignore their mothers' departures, cry less during separation-reunion, exhibit more avoidance in the reunion, show less emotional engagement in follow-up play after short interruption, and have a decreased ability to remain attentive during tasks.[28]

However, Orny et al. showed that a child's development was influenced more by the environment than in utero exposure.[32] Children exposed in utero to heroin but adopted at an early age showed normal development, while children not exposed in utero but raised in neglecting or abusing environments functioned poorly.[32] Orny et al. also found that the

incidence of hyperactivity and inattentiveness were high at 42% for children not exposed in utero but raised in an environment affected by addiction.[32] Further supporting the importance of the environment, hyperactivity was found in 20% of the children exposed to heroin in utero but adopted early in age, compared to 74% of the children exposed in utero and raised in an addiction environment.[32] Conners et al. found that children affected by maternal addiction who were in treatment with their mothers were more than twice as likely to have asthma, three times as likely to have hearing problems, and seven times as likely to have vision problems compared with children nationally.[17] In the same study, mothers reported 17% of their school age children received special instruction service at school such as remedial education or special education classes in the six months prior to treatment entry, and 18% were not in the appropriate grade based on their age.[17] Also, behavioral problems in school were reported for 24.4% of these children.[17]

Some of the risk factors children affected by maternal addiction face are low-income status of the mother, low maternal education, maternal mental illness, instability of caregivers, residential instability, child abuse and neglect, little father involvement, and experiences in foster care.[17] While each individual risk factor is important, the accumulation of these risk factors is paramount.[17] Evidence suggests that a single one of these risk factors will most likely not result in a developmental problem, but rather it is the accumulation of the risk factors that threaten the child's development.[17, 34] Conners et al. cite one of the earliest studies on cumulative risk factors in which researchers examined six risk factors (severe marital distress, maternal mental illness, low SES, paternal criminality, large family size/overcrowding, and child placement in foster care) in children 10 years of age and their relationship to psychiatric disorders.[17] In families with zero or one risk factor only 2% of children exhibited psychiatric problems,

compared to 20% of children in families with four or more risk factors.[17] The Rochester Longitudinal study results suggested that high numbers of environmental risks are related to lower IQ scores and increased socio-emotional problems in four-year-olds, with each risk factor resulting in an average four-point drop in IQ.[17] Conners et al. also noted that the Canadian National Longitudinal Study of Children and Youth reported that children aged six to ten with four or more risk factors had a rate of behavioral problems five times higher than that of children without multiple risks.[17] Additionally, over time, the effects of environmental risk factors affect development more than the adverse consequences of prenatal substance exposure.[17] Because of children's exposure to multiple risks, they have limited opportunities to develop skills for emotional regulation and social interaction and build stable, supportive relationships with caring adults, which could potentially serve as buffers and protect them against the risks they face.[17] Essentially, these children cannot protect themselves against the risks due to their exposure to the risks in the first place. These children are also at high risk for family disruption, exposure to violence, and poor physical, academic, and socio-emotional outcomes.[18]

2.1.2 Treatment

Treatment for substance addiction or abuse is beneficial not only for mothers suffering from addiction but men and women in general.[23] Despite its benefits, a relatively low proportion of women are in treatment compared to the prevalence of substance dependence or abuse in women, which could be explained by the barriers to treatment they face.[10] Mothers face additional barriers. Some of the barriers to seeking treatment mothers face are fear of losing custody[5, 6, 10, 14, 15, 18, 22, 25, 30], lack of child care[6-8, 10, 14, 15, 22, 30, 35], embarrassment[22, 30], and guilt and stigma[5-7, 10-15, 19, 22, 24, 25, 30, 35]. A history of physical and/or sexual abuse and mental health

issues are risk factors for women, but they can also be barriers to treatment.[7, 10, 12, 14, 15, 22, 35] Additional barriers include lack of readiness to seek treatment[10, 35], lack of transportation[6, 8, 12, 22, 35], economic situation[10, 13, 15], fear of prosecution[6, 10, 22, 30], pregnancy[6, 10, 30, 35], lack of services for pregnant women[6, 10, 30], family/partner resistance to treatment[10, 12, 35], lack of information about treatment options[10, 12, 15], and characteristics of treatment programs[15, 35].

Mothers report difficulty using conventional treatment programs due, in part, to these barriers.[18] Women-only treatment programs were designed to address the barriers that women and mothers face.[36] These programs are designed to meet their unique needs by offering comprehensive services such as life-skills training, prenatal, post-partum, and well-baby services, and assistance with housing.[10, 36] Sun reported qualitative studies that showed women found it easier to discuss children and physical/sexual abuse in women-only settings.[24] Other treatment options have been created to address mothers' barriers to treatment as well. Treatment opportunities for both mothers and their children address the custody barrier[7, 10, 12, 15, 18, 19, 24] and provide an environment that allows mothers to deal with their addiction and recovery while working on parenting skills and rebuilding their lives with their children.

Based on the risk factors for women, researchers, clinicians, and policy makers all recommend that treatment address both the mother's physical, social, and mental health needs and the children's needs by integrating services.[18, 20] Several integrated treatment programs have been developed for pregnant and parenting women.[5, 7, 12] These programs, whether residential or outpatient, include services such as group and individual addiction treatment, maternal mental health services, trauma treatment, parenting education and counseling, life-skills training, prenatal education, medical and nutrition services, child care, children's services, and aftercare.[5, 8, 11, 14, 18, 19]

Studies have shown that treatment programs addressing women's needs and allowing children to stay in treatment with their mothers result in longer lengths of stay.[5, 7, 10, 14, 15, 23, 24] While these integrated programs have yet to be associated with treatment completion, longer lengths of stay have been associated with improved outcomes.[7, 14, 23, 24] Niccols et al. cite a systematic review which found that programs including prenatal or child care were associated with improved outcomes with substance use, mental health, birth, employment, and health.[18] When substance-dependent women enter treatment while pregnant, the limited number of studies done consistently show that the effects of treatment, varying with the gestational stage at admittance, are increased newborn birth weight, fewer preterm deliveries, and a decreased number of days of infant hospitalization despite in utero exposures.[31] A qualitative study of "New Choices," an integrated treatment program for mothers in Canada, found that participants felt the program improved their parenting skills, helped them understand their children better, had a positive effect on their children's behavior and development, improved their health, increased their access and awareness to other resources, and decreased their substance use.[22] Treatment programs such as these could represent an opportunity to break the intergenerational cycle of addiction and dysfunction and improve child outcomes and parenting.[18, 19]

2.2 SOJOURNER HOUSE

Sojourner House is an example of an organization offering an integrated treatment program designed to meet the needs of mothers suffering from addiction. Sojourner House, located in the Garfield neighborhood of Pittsburgh, Pennsylvania, is a faith-based, in-patient residential drug and alcohol treatment facility. Sojourner House is licensed by the Pennsylvania Department of

Health Bureau of Drug and Alcohol Programs and as of June 20, 1994, is a 501(c)(3)[1] organization.[37] It offers a six-month rehabilitation program providing addicted mothers and their children 24-hour support. Sojourner House is a 14 apartment facility, offering services to 14 families at a time. There are both one and two-bedroom apartments to accommodate the residents and their children.

To be eligible for the program a woman must: be 18 years or older; have at least one child aged 12 years or younger; be actively seeking custody of a child or be pregnant; be willing to meet program requirements such as household, facility, self management, and schedule guidelines provided in the Sojourner House Guidelines booklet upon admittance (eg. adherence to bed times, chores, and smoking policies and completing counseling homework); and be serious about and dedicated to working on her recovery.[37] Residents can bring up to three children to live with them. All children living at Sojourner House must be aged 12 or younger. In addition to the eligibility requirements, Sojourner House gives first priority to pregnant injection-drug users, followed by pregnant substance users, injection-drug users, and then all others.[37] Preference is also given to residents of Allegheny County and the surrounding region.[37] Sojourner House receives referrals from legal courts, Children, Youth and Family Services, and various 28-day treatment facilities. Women are also able to call and request a spot in the program for themselves. The faith-based aspect of Sojourner House focuses on spirituality rather than a specific religion, and the residents are not required to be of a certain or any faith. Sojourner

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[1]According to the Internal Revenue Service, Publication 557, *Tax-Exempt Status for Your Organization*, a 501(c)(3) organization is tax-exempt under section 501(c)(3) of the Internal Revenue Code. In order to qualify, an organization must be organized and operated exclusively for religious, charitable, scientific, testing for public safety, literary, or educational purposes, to foster national or international amateur sports competition, or for the prevention of cruelty to children or animals. Also, the organization must be a corporation, community chest, fund, articles of association, or foundation.

House has successfully served atheist and agnostic women in the past and centers discussions on a higher power or something larger than the residents rather than a specific deity.

Sojourner House offers its residents a wide range of services throughout the six-month rehabilitation program. These services are specifically targeted to mothers suffering from addiction. It offers evidence-based gender-responsive treatment, individual, group, and family counseling, children's programming, and links to community resources. Upon entering the program, residents are assigned a counselor, a life-skills worker, and a parent educator with whom they meet weekly. In addition to the one-on-one sessions with their assigned staff members, the residents must participate in a strict, regimented daily schedule. Every weekday the residents are required to attend morning and afternoon group sessions. On the weekends, family counseling and family group sessions often occur.

If children are of school age, Sojourner House staff works with the Pittsburgh Public Schools to enroll them in school. During the summer, the staff tries to enroll every child of school age in some type of summer camp. The younger children remain in playcare while their mothers participate in the daily activities. Sojourner House also works with Familylinks, an organization providing integrated family-centered services in behavioral, social, and developmental health issues,[38] to provide the residents and their children with any necessary services they require that are beyond the scope of those offered at Sojourner House.

Sojourner House staff recognize the unique needs of mothers suffering from addiction and the children affected by maternal addiction. The rehabilitation program Sojourner House provides focuses not only on the residents' recovery, but also on how to improve parenting and life-skills and how to rebuild families. Of the 60 women admitted during the 2009-2010 fiscal year, 48% successfully reached the national benchmark of 90 days for successful drug and

alcohol rehabilitation.[37] In 2009, 46% of discharges aged 12 or older from long-term residential treatment centers in the U.S. reached the 90 day benchmark.[39] The average length of stay for residents in the 2009-2010 fiscal year was 85 days.[37] Fifty percent of the women who completed the six-month program moved into supportive housing.[37] Because the children of the residents also receive services, their progress is recorded during their stay. All of the children residing at Sojourner House receive programming based on their behavioral and developmental assessment levels upon arrival.[37] During the 2009-2010 fiscal year, 56 children lived at Sojourner House with their mothers.[37] All of the 56 children demonstrated achievement level gains in school readiness indicators, improved social behavior when interacting with peers, and improvement in cognition and general knowledge.[37] Additionally, 15 children were legally reunited with their mothers prior to leaving the program.[37]

3.0 DEVELOPMENT OF EDUCATIONAL GROUPS AND WRITTEN MATERIALS

Many factors are considered when developing educational groups and written materials such as the needs of the target audience and their education and reading levels. The methods used when leading groups need to be considered as well. Group content could be perfectly designed to meet the needs of the participants but fail to be effective due to poor group leaders. It is important to consider the necessary factors when developing groups and written materials, as they are designed to aid the developer in achieving a successful final product.

3.1 EDUCATIONAL GROUPS: DEVELOPING AND LEADING

Members participating in an educational group have the opportunity to gain information, gain knowledge about how others view them, and improve their own interpersonal skills.[40] Sands and Solomon present two differing viewpoints on the relationship between educational and treatment groups. One view is that educational groups are one of five types of treatment groups, which include support, growth, therapy, and socialization.[40] The other is that socio-educational groups, which emphasize education, socialization, and support, are different from treatment, social action, and administrative groups.[40] Regardless of the different viewpoints, it is important to remember that while educational groups have a therapeutic or healing element to them, they do not provide therapy.[40] Education focuses not only on the application of information, but also

its retention.[40] Retention of new information relies on both prior knowledge and the relationship of the new information to existing information.[40] Remembering these concepts is essential for group developers. It is important to understand the existing level of knowledge participants have in order to relate the new information to this knowledge and present the new information in a way that allows participants to apply the information to their own experiences.[40] Educational groups recognize the experiential knowledge participants bring with them and provide opportunities for sharing experiences.[40]

Before developing an educational group, developers determine a need for the group within the target population. Often, individuals working hands-on with a certain population notice a gap in knowledge or needs that an educational group could address.[40] Certain objectives are used to develop the group's structure and curriculum; however, this structure is made flexible enough to adapt to the needs of the participants.[40] Educational groups can last for different lengths of time such as weekly hour-long group sessions lasting 12 weeks or over a short period of time such as a workshop lasting one or two consecutive full or half days.[40] An advantage to having a group last over a long period of time is the participants have more time to absorb the information presented in each session and develop trust and rapport amongst themselves.[40]

Developers also consider the amount of time to allot for each individual session.[40] When determining the length of each session, developers allow time for participants to share their experiences, discuss the information presented, and ask questions.[40] The size of the group is considered as well.[40] For a long-term group, a smaller size is better, allowing for intimacy to develop over time.[40] When deciding on a location for the group, the topic of the group is taken into consideration along with accessibility of the location to those with disabilities.[40] If the topic

is stigmatized, the location and time of the group should not draw attention to the participants.[40] Locations such as libraries, recreation centers, and church halls work well in this situation.[40]

As group developers begin to address the educational content of the group, the cultural backgrounds of participants are taken into consideration in order to avoid any culturally inappropriate material.[40] Ideally, the topic of the group comes from a need in the target population. Consulting with experts and members of the target population helps establish a topic for the group.[40] Literature searches also aid in the development of the overall topic and the content for each session.[40] After choosing the topic and the content, developers focus on the lesson plans for each session, which include educational objectives, socio-emotional objectives, and the method of presenting the information.[40] When developing each session, creating a balance between information and support is important.[40] To avoid monotony and increase interest and engagement, developers use a variety of instruction methods across the sessions such as videos, guest speakers, PowerPoint, Prezi, and interactive lessons.[40]

Recruitment, screening processes, and an evaluation of the group's participants are essential to the implementation of educational groups.[40] Recruitment of participants could occur within one particular agency or could involve the whole community using press releases, posters, and word of mouth as advertisement.[40] Screening possible participants helps to ensure that the educational group is the best option for participants or determine if their needs would be better served through a different type of group or treatment.[40] One way to evaluate an educational group is through a pre- and post-test with the questions stemming from the group content.[40] Participants take the pre-test before the initial session and take the post-test after the final session.[40] If appropriate, open-ended questions may be added to the end of the post-test addressing what participants liked, disliked, and would change about the group.[40] The results of

the two tests are compared to assess the success of the educational group and inform the developers of any modifications needed.[40]

3.1.1 How to Effectively Lead Group Sessions

Developing the structure and curriculum of a group is important, but equally important is that effective leaders lead the groups successfully. Foremost, leaders must establish an accepting, non-judgmental atmosphere for each of the group sessions.[40] Leaders validate the feelings of the participants in order to create an atmosphere conducive to the sharing of personal experiences and discussion.[40] According to Hepner et al., there are a number of important criteria for leading groups.[41] First, leaders are responsible for managing the time of the sessions, ensuring that one participant is not monopolizing discussion time, and making sure every participant who wants to share gets an opportunity. Second, leaders allow the participants to share more information by asking open-ended questions rather than yes/no questions. Third, after a participant shares information, the leader restates what was said back to the participant in the leader's own words. Restating shows the participant that the leader paid attention and understood what was said. Fourth, reflecting feelings is also an important behavior for a leader. Here the leader does not restate what was said but extracts the emotion behind the statement and describes the participant's feelings. When restating and reflecting, the leader wants participants to feel comfortable enough to correct him/her if a misunderstanding about what was said occurs. Finally, the leader also pays attention to the participants throughout the session. If participants seem uninterested, the leader can bring them back into the discussion by asking questions such as "What do you think about this information?" and "How did the discussion make you feel?"[41]

3.2 WRITTEN EDUCATIONAL MATERIALS

Written educational materials are developed for different reasons, such as providing information and increasing awareness, changing behaviors or beliefs, or continuing the healthy lifestyle behaviors of individuals.[42] Written education materials can also supplement or reinforce information provided verbally.[43] Health professionals utilize written educational materials such as pamphlets to deliver health messages for several reasons such as their cost-effectiveness[42] and time-efficient quality[42]. They are also attractive because they are easy to store[44] and require no special equipment[44].

To be effective, educational materials need to be readable by and understandable to their target audience.[42] Ideally, key stakeholders, including members of the target audience, are involved in the entire process of developing the material.[43, 45] One reason to involve members of the target audience throughout the development process is to ensure that the material is culturally appropriate. Creating culturally sensitive, non-judgmental, and relatable material is crucial.[43] Also, the purpose of the material needs to be apparent or the reader may not pay attention to the material.[43] Shorter sentences rather than longer ones with each sentence expressing only one idea increases the readability of the material.[43] Whenever possible, developers avoid using jargon, but if it is used, they define it appropriately.[43] Language that could be deemed as patronizing, blaming, or judgmental such as "will," "should," or "must" is avoided and replaced with words with phrases such as "you may find it useful to...".[43]

In addition to sentence structure and word choice, it is essential to take into consideration the reading levels of the target population.[43] Developers write material using the active voice and a conversational style to lower the reading level of the material and interest the readers.[43] Health care materials are typically written at a fifth to sixth grade reading level.[43] The health

literacy of the target population is considered as well. Health literacy is the "degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (p. 20).[46] The results of the 2003 National Assessment of Adult Literacy indicated 22% of adults had basic and 14% had below basic literacy on health-related items.[47] Those who performed in the two lowest literacy levels were more likely to be poor, elderly, individuals with disabilities, or members of a minority group, all of whom generally have the highest risk for health problems and health disparities.[47]

Sentence structure, organization of ideas, design, and presentation of the information can affect the reader's understanding of the material.[42] When organizing the content of the material, subheadings are used and followed by highlighted information because many readers focus only on the heading, subheading, and the highlighted material.[43] Also, bullet points capture the reader's attention more than solid text, help people follow procedures, and are remembered and understood better than paragraphs.[43] Short paragraphs that present only one idea each and include the main idea in the first sentence are best.[43] By grouping related ideas together, the reader is more likely to understand and remember the information.[43]

The cover of the material is meant to attract attention, clearly display the title of the material, and communicate the purpose of the material, while also being friendly and appealing to the audience.[43] By having white space border the text and sections with space between them, the material is made more appealing to readers.[43] To improve legibility, use serif font style[43] and 12 point font size minimum[43]; link the amount of space between lines to the font size[48]; have no more than 70 characters to a line[48]; use ragged margins rather than justified text[48]; use bold rather than italics or capitals for emphasis[43, 48]; avoid underlining[48]; and write numbers as

numbers, not text[43]. In order to create a color contrast between the ink and the paper, use dark print on a light background.[43]

Pre-testing written educational materials with the target audience is a crucial part of material development.[43] Pre-testing allows readers from a sample of the target audience to provide feedback about the design, layout, color scheme, content, and overall readability of the material.[43] Based on the feedback any necessary changes are made to the material.

4.0 PROJECT DEVELOPMENT AND IMPLEMENTATION

4.1 THE BEGINNING

Bridging the Gaps (BTG) is an eight-week summer internship program aiming to improve the health and wellbeing of underserved communities by providing community service, promoting public health in underserved communities, and training community-responsive health and social service professionals. The BTG program pairs together students from different health science disciplines and places them at one of the participating community organizations serving underserved populations. BTG promotes experiential learning and hands-on experience within these populations. The students work directly with the assigned community organization and the population being served. The end goal of the BTG program is not only to educate the students on underserved populations and their needs, but also for the students to develop a tangible, sustainable product to be left with their assigned organizations. The products developed are meant to address a need expressed by the population being served.

As BTG student interns for the summer of 2012, Rachel Delzangle, Graduate School of Public Health, University of Pittsburgh, and Kandace Powell, School of Social Work, University of Pittsburgh, were partnered. Their assigned organization was Sojourner House, a faith-based, in-patient residential drug and alcohol treatment facility, in the Garfield neighborhood of Pittsburgh, Pennsylvania. The students spent the first three weeks of the internship observing and

participating in the daily activities of the Sojourner House residents and staff. These observations included sitting in on the daily group sessions, which are an integral part of the treatment program at Sojourner House. The students spoke with the clinical supervisor (also their site mentor), Ms. Sharon Jones, M.S., CAC, CCDP (Ms. Sharon), as well as the counselors, life-skills workers, and parent educators about any needs they felt the program had. These needs could be part of the program itself or any of the residents currently receiving treatment. In addition to speaking with the staff, the students held informal discussions, individually and in groups, with the residents about what they felt the program was missing, what they needed as residents, and what they would like to receive from the students.

From their observations, discussions with staff, and discussions with the residents, the students noted that the residents wanted more information about how their addictions affect their children. Additionally, Ms. Sharon expressed a desire for the students to lead at least one group session during their time at Sojourner House. Combining these wants and needs with the help of the assistant clinical supervisor and counselor Ms. Karen Garland, B.S. (Ms. Karen), the students decided on their BTG project at the end of week three. The project was the development and leadership of weekly group sessions revolving around empowering the residents through educating them on the various ways being exposed to maternal addiction can affect children, along with the development of a complementary pamphlet.

4.2 DEVELOPMENT AND IMPLEMENTATION OF THE WEEKLY GROUP SESSIONS AND PAMPHLET

Based on the amount of time remaining in the BTG program, the students developed a four-week curriculum. The design of the sessions was such that the discussions from Week One influenced the content and presentation of the content for Week Two and so on. The staff allotted the students a 60-minute time slot on Friday mornings. The process for the design and development of the four-week curriculum relied on brainstorming between the students, reporting ideas to Ms. Sharon and Ms. Karen, and taking their advice when developing the final version of the session for the week. When designing the sessions the students kept in mind that while one purpose of the curriculum was to educate the residents by providing information they requested, the curriculum also needed to empower the residents and give them hope going forward, a core concept of all the group sessions at Sojourner House.

Recruiting and screening participants for any type of group is an essential part of the development process, as is setting the location and time of the group.[40] However, due to the setting in which the students held their sessions, they did not have to develop a recruitment strategy or screen potential participants. The residents of Sojourner House attend weekly groups as part of their treatment program. Attendance is mandatory at these sessions, and participants must get their logs signed indicating their attendance. Sojourner House staff inserted the students' group as part of the mandatory weekly groups. Being at Sojourner House, the students did not have to decide on location or time. The location was the community room at Sojourner where all groups are held, and the staff decided the time based on availability.

The age of the residents who participated in the students' group sessions ranged from the early-twenties to early-forties, with a majority of residents being in their late-twenties and early

thirties. The age of their children ranged from a few weeks to seven years of age. All of the residents had more than one child, except for three residents. However, only two of the residents with multiple children had all of their children living with them, taking into consideration the age restriction and the number of children per resident allowed at Sojourner House.

4.2.1 Week One: Exploration

The first step in developing the Week One curriculum was defining the overarching themes, which would be used to tie all four weeks' curriculum together. The overarching themes were to equip women with the necessary tools to help their children overcome possible impacts of maternal addiction and to empower women to break the intergenerational cycle of addiction in order to move the family into wholeness.

The next step was to use the overarching themes to decide which direction to go with the Week One session. Week One curriculum focused on setting a tone for the rest of the group sessions. The students decided the Week One content would lay the groundwork for the remaining three sessions. The residents needed to know what the sessions would be about and what would be expected of them during these sessions. The students felt it important to inform the residents of the overarching themes and allow the residents' to relate these themes to their lives and their families. In order to allow for some self-regulation, the students wanted the residents to develop a set of rules to follow during these group sessions. When developing the rest of the group content, the students viewed Week One as a time for exploration. A focus was put on getting the residents to discuss their pregnancies. The goal of this discussion was to have the residents include some good aspects and some negative aspects of their pregnancies and how the negative aspects made them feel. The ending of each weekly group session was designed to

include a review of the session and time to answer any additional questions the residents might have before the session broke up. The students created outlines for each of the group sessions for their own use (see Appendix A).

Following the development of the Week One session, the students implemented it with the residents. Of the eleven residents at Sojourner House the day of the first group session, nine were present for at least a portion of the first group session. The group started with eight residents with the ninth arriving halfway through. Three other residents left the session halfway through to go to outside appointments. Staff informed the students before the session that the staff member who typically leads the group in the time slot after their group was not at work, and they would have two hours of time to fill instead of one. Before getting into the material planned for the session, the students informed the residents that this group would be a weekly group lasting for four weeks. The students told the residents that each session would be based on their expressed needs along with their discussions from the previous week.

The students handed out slips of paper with the overarching themes for the weekly group sessions, allowing the residents to read them before the students read them aloud. The students then asked the residents what the overarching themes meant to them and what would "wholeness" look like in their families, reassuring the residents there were no right or wrong answers. After some time for thought, the students began writing the residents' responses on the board. Some of the ideas about the overarching themes were: "educate my children on the nature of addiction"; "show my children the right way to live compared to how they lived when I was in my addiction"; "show my children how to be a better mother by modeling the behavior"; and "not parenting out of guilt." Some of the responses to what "wholeness" looks like in their family were: "I can't make up for not being there, so what can I do right now, today"; "taking your

personal definition of wholeness and projecting what you envision"; and "learning to be patient with my children and realizing they are transitioning and overcoming their own traumas." The students asked the residents to develop their own set of ground rules for the group sessions that would be displayed every week. The students wrote the rules down on a display board and posted them for the residents to see. The ground rules established for the weekly group sessions were:

- share the time;
- no side-talking;
- be mindful of facial expressions;
- no cutting people off;
- respect the ideas of others;
- one person speaks at a time;
- stay relevant to topic; and
- raise your hand to speak.

The students told the residents that being resilient would be discussed, and it was important for everyone to know what it meant to be resilient. Before asking the residents what being resilient meant to them, the students shared what they meant by the term: to bounce back. The students and the parent educator supervising the session gave examples from their lives. One of the residents said that all of the residents at Sojourner House are resilient because they are sitting in treatment and are alive despite everything in their past and their addictions. The residents nodded and all seemed to be in agreement with this statement. The students and parent educator agreed as well. At this time the first hour was over, and the residents went outside for their ten minute smoke break. After the smoke break another resident joined the session, and

three others had to leave, making the total number of residents present six. The students informed the latecomer about what had already occurred while refocusing the residents just coming back from smoking.

The next topic of discussion was pregnancy. The students asked the residents to share what their pregnancy experiences were like. What were some of the good things? What were some of the negative things? The residents began discussing who used drugs while they were pregnant and who did not. One of the residents who did use said she used less than normal and stopped using altogether two weeks before her due date. This resident asked if her drug use while pregnant could be the reason for her child's current behavior. The parent educator answered saying, yes, it could be. The same resident then expressed how she does not like when other residents say her child will have attention deficit disorder (ADD) or attention deficit hyperactivity disorder (ADHD) because she used while pregnant. She stated that using while pregnant was an awful thing to do, but at the same time every child develops differently. The students acknowledged that she was correct in saying that, and that women who exercise, eat healthy foods, take all of the prenatal vitamins, and never miss a doctor's appointment could still have a child at risk for developing ADD or ADHD. At this time another resident said that she wanted to learn some coping strategies for dealing with hyper children and children with separation anxiety. Sojourner House has taught her strategies for dealing with the child, but she wanted to know of ways to cope with the behavior and stress as a mother.

The residents spent the rest of the session talking about pregnancy in general. The discussion included what a c-section felt like, learning that labor was more than just pushing, the pain of labor, and the amount of time each resident spent in labor. The residents also discussed

due dates. Some residents went seven to 10 days past their due dates, while others went into labor prematurely.

Before dismissing the residents, the students recapped what was discussed throughout the session. The students also reminded the residents their group sessions would be weekly and last for three more weeks.

4.2.2 Week Two: Possible Physical Features of Babies Exposed to Drugs/Alcohol in Utero

The students felt it was important to start each group session with a review of the overarching themes, a summary of the previous week's session, and the ground rules established in Week One. Based on the discussions of Week One and the original needs expressed by the residents, the students designed the Week Two session around the possible physical features of babies exposed to drugs/alcohol in utero. When developing this group, the students decided giving the residents the facts was not enough. The residents needed to be able to relate the information to their own lives in some way. To facilitate this, the students developed a handout/worksheet to aid in the presentation of the information (see Appendix B). The students divided the session into three sections. In the first section, residents were asked to visualize what they wanted their child's life to look like in five years and write it down on the handout. The second section involved the students presenting information about the possible physical features of babies exposed to drugs/alcohol in utero via a PowerPoint slide with photos of three babies, one affected by fetal alcohol syndrome and one exposed to methadone, as well as a healthy baby. In the third section residents were referred back to the visualization in the first section.

For the Week Two session, nine of eleven residents were present at the beginning. As the students were about to begin, staff members came into the room with one of the residents and put

a hold on the session. The resident had to apologize for two separate incidents that occurred the evening before. The resident said her apologies, but the incidents were rehashed, leaving the group of residents arguing and taking sides. The residents calmed down with staff intervention, and there were more apologies. This incident took up 20 of the 60 allotted minutes of the students' group session.

The students asked the residents if they remembered what was discussed during the previous week's session. As only a few of the residents in attendance were not present for that session, the residents reported back the main topics covered the previous week. The students reread the overarching themes and reviewed the ground rules established last week. The students posted the ground rules for everyone in the group to see. During this time four of the nine women left to go to outside appointments, leaving the students with a group of five residents. The students distributed a handout to the residents with instructions to answer only the first question. The question was "In five years, how would you like your child's life to look?" The residents had time to think and write down their answer.

Then the students brought up a PowerPoint slide on the television screen showing pictures of three babies of roughly the same age, the same race, and the same gender. The students divided the residents into one group of three and one group of two and asked them to use the handout to write down any similarities and differences between the babies. After a few minutes, the students asked what the residents thought could have caused those similarities and differences. After allowing for some group discussion, the students had one resident from each group report back. The groups reported back roughly the same information. The similarities they listed were that "the babies were all boys, all had hair, same skin color, all showed some type of facial expression, had eyes open, and seemed under the age of three months." The differences

reported were "hair color, head shape, mouth shape, expression, possible needle marks on Baby #2's hands, Baby #2 doesn't look right, Baby #2 looks sickly." The parent educator supervising the session said, "Baby #1 and #2 look frazzled and sick, Baby #1 looks uncomfortable, and Baby #3 looks alert."

At this time the students revealed that one of the three babies was exposed to alcohol in the womb, one of the babies was exposed to opiates in the womb, and one was not exposed and healthy. The students asked the residents to pick which baby was which and state why. All but one of the residents identified the babies correctly. They said Baby #1 was exposed to alcohol and had fetal alcohol syndrome (FAS), Baby #2 was exposed to opiates, and Baby #3 was healthy. Their reasoning was that Baby #1 looked like he had FAS because of his eyes and the shape of his head, and Baby #2 was exposed to opiates based on how sick and sad he looked compared to Baby #3. At this point another resident entered, bringing attendance up to six. The other residents told her what the group was doing and identified the different babies for her. After hearing the reasoning behind their choices, the students correctly identified the babies to the residents.

Then the students talked to the residents about the possible physical features of babies exposed to drugs/alcohol in the womb. The students started by telling the story of Baby #2 because many of the residents commented on how sick he looked. Baby #2 was born five weeks premature, was exposed to methadone, and was placed directly into foster care. At the age of 11 weeks he died of sudden infant death syndrome in the foster mother's bed. The facial expressions on two of the residents visibly changed and one of the two began crying. Many of the residents expressed how sad they felt for the infant and talked about how the death might have been

prevented. The group was interrupted when another woman entered, drawing the residents' attention away from Baby #2's story and bringing attendance up to seven.

The students began talking with the residents about FAS and the physical features often associated with it. Some of the features discussed were low birth weight, small head circumference, small eye openings, drooping eyelids, thin upper lip, smooth and wide philtrum, flat nasal bridge, upturned nose, and underdeveloped ears. While the physical features of FAS may become less apparent with age, they will be present for life. One of the residents stated that her child has one of the features. The students explained that some of the facial features can be genetic and if someone has just one or two of the features it may not be due to FAS. When several of the features are present, it is more likely due to FAS. The resident who said her child had one of the FAS features went on to admit to binge drinking occasionally during her pregnancy. The parent educator told the resident that her child does not show the signs of FAS. The students explained that a mother does not have to be an alcoholic to have a child with FAS. It can happen to anyone drinking during pregnancy. The residents appeared to be engaged in the session as they were interacting with the information being presented. Another resident entered bringing attendance up to eight.

Due to losing the first 20 minutes of the session, the students quickly went through the information regarding methadone, heroine, and cocaine in order to cover everything. The possible physical features of babies exposed to opiates or cocaine included low birth weight, small head circumference, and low birth length. The students pointed out that the babies can outgrow these features. Years in the future the child would likely not be singled out from a group of people as being exposed to drugs in the womb based on physical appearance. The residents continued to ask questions and remained engaged. Several residents asked for a print-out of the

information. The students said that the residents would receive a pamphlet at the end of the four weeks with some information from each session. If the residents wanted more information, the students would provide them with more information if asked.

The allotted time was almost up, so the students returned to the question the residents answered at the beginning of the session. The students asked the residents if they wanted to share. One resident said she wants her children to have confidence, high self-esteem, and high self-worth. She wants to see them happy in their lives and succeeding at school. Another resident said she wanted to see her child become more outgoing, enjoying school, and involved with sports. She also wanted to have her older child back in her custody and for this child to have eye surgery so he is not made fun of at school. Before reviewing the session, the students asked the residents to think about what could prevent their child from being where they envision them in five years.

4.2.3 Week Three: Possible Behavioral Features of Children Affected by Maternal Addiction

Based on the Week Two discussions, the students chose the content of Week Three to be the possible behavioral features of children affected by maternal addiction. As noted earlier, the students recognized the importance of relating this information back to the residents' lives. The design of the session allowed for the residents to reflect on the information by reintroducing the vision of where they see their child in five years. Expanding upon this idea from Week Two, the final part of the Week Three curriculum asked what the residents could do as mothers to help get their child where they want them to be.

The Week Three session ran the allotted 60 minutes and started with nine of ten residents in attendance. The students reread the overarching themes and referred to the posted ground rules developed in Week One. The session began with the students asking the residents what they remembered from last week's group. Two of the residents went through all of previous week's activities and a majority of the information. After hearing this recap, some of the residents who missed Week Two said they wished they had been there to see the photos and participate in the discussion. The students moved on to the true or false statement part of the session.

Instead of displaying or reading the information to the residents, the students chose an interactive approach involving true or false statements displayed via PowerPoint, discussing each statement one at a time. When the first statement appeared on the screen, the students read the statement aloud and asked the residents to give their answers. The statement was "Using drugs or alcohol during pregnancy could result in future behavioral problems in your child." The first resident to respond did so quietly. She said true, but that it was just a guess. A few other residents also thought the answer was true based on information learned in a different group at Sojourner House about the effects of drugs on the brain development of infants. The students moved to the next slide showing the answer (true) and some of the behavioral problems children exposed to drugs/alcohol in utero may develop. When seeing the list of behavioral problems, some of the residents said their older children exhibited some of the behaviors or have ADHD. Other residents expressed frustration with the list of behaviors, asking how much of those behaviors are a child's personality and how much indicate an actual problem. Those residents wanted to know where the line is drawn between a diagnosis and no diagnosis. The students said they struggle when thinking about these behaviors, especially with younger children. One of the residents asked the age when ADHD is diagnosed. Not knowing the answer, the students assured

the resident they would get that information for her. At this time, one of the residents left the session for an outside appointment leaving eight residents.

The next statement was, “I didn’t use during my pregnancy or in front of my children, so my addiction has not affected them.” The residents quickly answered false. Their reasoning was that children are sponges. Children may not know their mother is on drugs, but they know something is not right. Several of the residents said their children noticed differences in their behaviors when they were high and when they were not. One resident shared that her child used to say, "My mommy is sick, but when she gets her medicine, she’ll be better." This resident clarified that the “medicine” was drugs. When this resident was high she said she felt like super mom. She would cook, clean, and care for the child, but when she was sober she would be indifferent to everything. The students asked the resident, now that she is in recovery, if she still thinks she was super mom when she was high. She said no, she probably was not. Another resident said that being exposed to drugs or alcohol in the womb could lead to problems in children, but it is also how they live their lives and how they are raised. The students said the residents were correct, the answer was false and revealed the answer slide. The residents had already discussed many of the points on the slide, so with no additional questions the students moved on.

The third statement was, “The major factor that influences the development of children born to drug-dependent mothers is the home environment the child is raised in.” Some residents thought the answer was true and some thought it was false. One resident said it was false because of all of the other things that could affect a child’s development and behavior. Many of the residents began to describe the home environment as a physical environment, such as is the house clean or messy. At this point, one resident spoke up saying the environment is not just

physical, that the environment is everything from the way that mothers interact with their children, to family dinners, to how many times the children are told they are loved. The students told the resident she was right. This was the environment to which the question referred. The answer was true, and the students presented information about neglecting and abusing environments while explaining why the answer was true. The students also explained that over time the environment plays more of a role in the child's development than exposure to drugs/alcohol in utero. After seeing and hearing the information, many of the residents said they could see how the environments described affect their children. When the characteristics of neglecting or abusing environments were on the screen, a resident noticed that a single parent home was one of them and that surprised her. The students told the resident that it is a combination of these characteristics or risk factors that leads to the behavioral problems. One characteristic can be dealt with, but the more characteristics that are present the harder they are to overcome. Another resident brought up that these characteristics can exist in any home, not just the home of a drug user. All of the residents agreed with her and said that helped them see the importance of the environment.

The final statement was, “The more risk factors a child is exposed to the more likely the child will suffer developmental and behavioral problems.” Based on the discussion of the last question, all of the residents answered correctly with true. The students stressed that the accumulation of risk factors puts the child at more risk for behavioral problems than the presence of one or two risk factors alone. One resident said all of the behavioral information made her reflect upon the environment in which she was raised as a child. This resident’s mother did not use while she was pregnant, but the home environment growing up was violent and unstable.

This resident said she has many of the behavioral problems highlighted, and the information provided showed her how important the environment can be.

One of the residents was set to graduate the program soon, so the students asked her what safeguards she could put into place to ensure a safe, secure environment for her child. The resident said the most important thing for her to do is to keep her spirituality up and keep a spiritual home. The students asked the other residents to think back to where they envisioned their children in five years and again asked what could prevent them from getting there. This time the students also asked what the residents could do as mothers to help their children get there. All of the residents stated that remaining in recovery was the most important thing they could do for their children. Relapsing would hinder their children. One resident said creating an encouraging environment is what she wants to do to help her children thrive.

Before ending the group the students asked if any of the residents had anything else they wanted to discuss. In response, one resident shared the difficulties she was having with the caregivers of her eldest child. The caregivers were keeping her child from speaking on the phone with her and refused to give the child her letters. The resident spoke about how sad this makes her as a mother. The other residents supported her and said she is doing everything right, keeping contact even when the caregivers refuse. The residents suggested she talk to staff about what she could do. When the discussion wrapped up, the students closed the group by summarizing the session's discussions and highlighting important information. The students also reminded the residents that next week would be the last group session. Afterwards, the students noted between themselves that the residents seemed less interested in this week's session compared to the previous week. The residents were less enthusiastic and quieter, likely due to being more thoughtful about their personal lives and events that had occurred that week at Sojourner House.

4.2.4 Week Four: Stress Relief

The Week Four group session was developed from the residents' discussions in Weeks One and Three. The development of the session focused on providing the residents information about stress, along with some examples of simple stress relieving techniques. The students felt it was important to incorporate demonstrations of the stress relieving techniques followed by time for the residents to practice them. The students designed the session to allow the residents to relate the stress information to their own lives by including a discussion about their stressors.

The session ran for the allotted 60 minutes. Eight of eleven residents were in attendance at the beginning with one resident arriving late for a total of nine. The students read the overarching themes and reviewed the posted ground rules. The residents and students reviewed the activities and information covered in the previous week's session, once again highlighting the importance of the environment in a child's development.

The students asked the residents to think about the things in life that stress them and told the residents to write their answers up on the board as they thought of them. The residents joked with one another as they wrote on the board, realizing many of them had similar stressors. Some of their stressors were their baby, Sojourner House, expectations, lack of humility, finances, the future, children, inconsiderate people, people in general, lack of access to resources, drama and chaos, control freaks, legals (charges brought against them, court hearings), probation, ungratefulness, out-of-control kids, and relationships. When asked if they had control over anything they wrote or anything they could eliminate, the residents said not really. However, one resident said that while they may not be able to eliminate the stressors, they can change their reactions to them. A few of the residents nodded in agreement, and the students agreed as well, saying how insightful the statement was. Another resident said that sometimes stress is a build-

up of a lot of little things. All of the residents stated their stressors are different while they are at Sojourner House than when they are out in the world. They discussed how interacting with the staff and living in this type of setting provides its own unique set of stressors. Along this same line, the residents said that when they are out in the world they have more choices for how to deal with their stressors such as avoiding the people who cause them stress.

The students asked if the residents could think of a time when stress would be a good thing. One resident said some stress is good because it is natural. Another resident made the point that everyone needs stress because when something negative happens, stress makes you stay or run. This resident gave an example that when she noticed her children's behavior and moods, her stress about the situation made her take action and get them into counseling quickly. Other residents used stress as a motivator. The students noted the residents were right, stress can be a good thing, but it should not be a constant feeling that is struggled with regularly. When a person continually experiences too much stress, problems arise such as illnesses rooted in stress. The students shared some of the physical symptoms of stress with the residents such as frequent colds, increased blood pressure, slower digestion and metabolism, nausea, and tense muscles. Several of the residents spoke up or nodded when tense muscles were mentioned, saying they feel it in their shoulders.

Next, the students discussed stress relieving techniques such as breathing exercises, reading or watching something to make you laugh, listening to music, taking time out for yourself, and prayer. When discussing the breathing exercises, the students demonstrated them and then had the residents join in as well. One resident said the breathing exercises made her feel fat. The students shared that not every stress relief technique will work for everyone. The key is finding one that works and sticking to it. Then the residents shared that most of the examples

discussed are techniques they use. The parent educator supervising the session stated that asking for help can sometimes be the best thing. Asking for help is a sign of strength. There were no more questions or comments, so the students reviewed the information covered in this session and the previous three sessions. The students also reminded the residents that this was the final session of their weekly group.

By the end of the weekly group sessions, the residents expressed that they learned a lot from the students' group sessions. One of the residents who was a few days away from finishing the program expressed gratitude that she got to experience the group before she graduated from the program. She said, "I feel so lucky that I got to be a part of your group because I learned a lot, especially about the environment, that I can use when I leave Sojourner." Multiple residents stated they feel their opinions are often discarded and their ideas are ignored, and by tailoring the group sessions to their needs, discussions, and ideas the students increased the residents' feelings of importance and self-worth. One resident said, "I came here with my self-esteem at an all-time low. I could tell that you guys were listening to us because you used our ideas, and that made me feel important."

4.2.5 Pamphlet

The students developed a pamphlet with information corresponding to each of the weekly group sessions plus additional resources for residents to utilize after graduating or leaving the program. The students developed the pamphlet after implementing the group sessions so information the residents said they found interesting or important could be included. The additional resources included in the pamphlet were programs for children such as Early Head Start, a program for pregnant women and children aged birth to three years with activities designed to promote

healthy prenatal outcomes and enhance the development of children, and the Alliance for Infants, an organization that provides programming and activities for children aged birth to three years at risk for developmental delays or who show developmental delays. The programs the children at Sojourner House are already involved with influenced the design of the resources section of the pamphlet. The color schemes and layout of existing pamphlets developed for Sojourner House heavily influenced the overall design of the students' pamphlet.

The students pre-tested the pamphlet with both the staff and the residents. The staff made suggestions about resources to add, what they thought could be eliminated, and what they thought worked well. The residents noted the importance of having all of the additional resources in one place. The residents also had suggestions about what information was valuable to them and what was not. Changes were made based on staff and resident feedback. Figure 1 shows the cover page of the pamphlet (see Appendix C), Figure 2 shows the inside pages (pages two and three) (see Appendix C), and Figure 3 shows the back page (see Appendix C). The students printed 50 pamphlets and provided them to Sojourner House to include in the intake packets all new residents receive as well as to distribute to the current residents.

4.2.6 Sustainability

The students created a binder for the Sojourner House staff with all of the necessary information to replicate the weekly group sessions with a new group of residents. The binder included outlines for the weekly group sessions, the Week Two handout, news and journal articles used to develop group content, printed copies of PowerPoint slides used, and a flash drive with all of the files for the materials used. Both Microsoft Publisher and Adobe files of the pamphlet were

placed on the flash drive, so Sojourner House would be able to print additional pamphlets when needed.

A reminder from the BTG staff made the students realize they had not performed or developed a method of evaluation for the group. In response, the students developed a ten question pre- and post-test as the means of evaluation with the questions derived from the weekly group session content. The students also drafted an instruction page for Sojourner House staff for implementing the pre- and post-test. Instructions on when to give the pre- and post-test to the residents were added into each group session outline. The students added copies of the pre- and post-test, an answer sheet for the pre- and post-test, and the instruction page to the binder and placed the files for the documents on the flash drive.

5.0 DISCUSSION

Before developing and implementing an educational group, developers determine a need for the group within the target population.[40] The students believed that the residents' high level of participation and interest in the weekly sessions reflected that the group addressed a need at Sojourner House, specifically one the residents themselves identified. One of the reasons the students believed addressing the residents' needs and concerns was important arose from observing a parenting group led by one of the parent educators. This group focused on educating the residents about the different stages of development and Erikson's stages of psychological development. Participation was low, with the residents primarily sitting quietly throughout the group. After the group ended, the students asked the residents how they felt about it. They recognized the information as important, but they wanted more information about how their drug use impacted their children. This group attempted to meet a need but did not tailor the information to the concerns of the residents.

Along with the sessions meeting a need, the students believed tailoring each session based on the previous week's discussion influenced participation and interest as well. The residents expressed in informal discussions with the students that they feel their ideas and opinions are often discarded. By building on the residents' discussions, the students hoped to improve their self-worth, illustrating that their ideas are worthwhile and important and that the students actively listened to those ideas. Tailoring each session based on the residents' ideas and

discussions was the ultimate form of restating, which is an important behavior that shows the participants the leader was paying attention to their discussions.[41] The residents recognized the students' efforts and said that by tailoring the group sessions to their needs, discussions, and ideas the students increased their feelings of importance and self-worth. Based on the response of the residents, the students felt this method of group construction was successful and should be considered, when appropriate, in future group development. The students used restating throughout each of the sessions as well. One example is from the Week Three session when one of the residents accurately described what the students meant in one of the true or false statements. The students confirmed the resident's thoughts, then repeated back what she had said.

Creating an environment in which the participants feel comfortable sharing their experiences is essential.[40, 41] The students created an accepting, non-judgmental environment by developing rapport with the residents and showing the residents they were not judging them. Coming in as students who did not have past experience with drug use or addiction, the students needed to establish trust and rapport with the residents. The students benefited by having three weeks to interact with the residents before leading their first session. The students tried to control their reactions when residents shared about their past because expressing personal reactions to shared information, whether verbally or nonverbally, could make the sharer feel judged. The students demonstrated that they cared about the residents and their children by being themselves and engaging in conversation with the residents outside of the groups. One resident said, "When you got here I was like ‘Great. Who are these girls? They aren’t addicts, and they are going to listen to all of our crap.’ Then the more you guys stayed, I saw that you genuinely cared about us and our kids. That is great.” Another resident said, "I really appreciate that you didn’t judge me when I'd get brought up on stuff with the staff. The rest of the morning you'd just talk to me like

you were never there and never heard what staff said about me or my responses." Also, at the start of each group session, the students reiterated to the residents that their group was no different from the others at Sojourner in that everyone's opinions and experiences are valid, and no one was to be judged based on what they shared or their responses.

That the students created an accepting, non-judgmental environment was evident in the amount of participation and sharing on part of the residents. An excellent example of this is from the Week Three session. At the end of the session, the students asked if there was anything else the residents would like to discuss, and a resident brought up issues she was having with her eldest child's caregivers. If this resident did not feel accepted and comfortable in the students' session, then she would not have voluntarily brought up an issue that she could have discussed in another group or counseling session. In all of the sessions the residents shared not only their personal stories, but also how the information being presented related to their lives and how it made them feel. Creating an environment in which the residents felt comfortable was crucial to every other aspect of the group. The residents needed to feel comfortable in order to share, discuss, and ask questions.

According to the literature, creating opportunities for participants in group sessions to share their experiential knowledge is important.[40] The students dedicated the first group session to acknowledging that the residents were the experts on motherhood and addiction, as the students had experienced neither. Based on the residents' participation and responses during the first session, the students felt that the residents knew they were the experts on the topics, sharing details about child birth and their substance use during pregnancy. The residents took the time to educate the students. Along with creating an accepting environment and recognizing experiential knowledge, the students knew the importance of allowing time for discussion rather than simply

presenting the residents with new material. Leaving time for discussion and questions is essential when developing group sessions.[40] The students felt the most valuable parts of their sessions occurred during the discussions, which is when the residents were able to share how the information impacted their lives. One example is from the end of the Week Three session when a resident shared how growing up in an unstable home likely affected her behaviors and decisions as an adult. By integrating discussion time into the session, the students were able to see this resident move from initially thinking other factors were more important than the environment to attributing some of her behaviors to her unstable environment. Another example is from the Week Two session when, instead of listing the facts about the physical features of infants exposed in utero, the students created interactive discussion using the photos of the babies. This method of instruction appeared effective as the residents were engaged in discussions, repeatedly asked for more information, expressed how much they got out of the session, and how much they enjoyed the session.

Asking open-ended questions is one important way to facilitate discussion in group participants.[41] The students developed the session content with this in mind and asked impromptu open-ended questions when appropriate to prompt discussion among the residents. This was evident in all four of the sessions. In the Week One session the students did not ask the residents yes/no questions about their pregnancies, but instead said, "Tell me about your pregnancy." Roughly 40 minutes was spent talking about the various aspects of their pregnancies. The residents were not confined to answering a specific question, they were able to share about any part of their pregnancy they wished. Another example of the good use of open-ended questions was during the Week Four session when the students asked the residents what their stressors were. Rather than asking the residents if they ever experienced stress, the students

provided an opportunity for the residents to share many of their stressors. This proved to be a fruitful exercise as the residents realized they had stressors in common with one another. It also provided them an opportunity to apply information presented later in the session to their specific stressors. Through this question, the students learned that the residents' stressors were different while they resided at Sojourner House than when they were out in the world. The students likely would not have learned this valuable information if an open-ended question had not been asked. Also, this example illustrates again that the residents felt comfortable enough with the students to share their different stressors at Sojourner House and why they existed.

One of the uses of written educational material is to supplement or reinforce information presented verbally.[43] When the students developed the pamphlet, they made it complementary to the group sessions. Developing the pamphlet in this way was successful based on the feedback from the residents. They were glad to have some of the information from the sessions to refer back to. The residents said they especially liked having the contact information for additional resources all in one place. The staff also noted that including the additional resources was a benefit for the residents.

Bulleted information is used in pamphlets because it attracts readers' attention and is easier to remember and understand than paragraphs.[43] Subheadings are used to make information easier to find within material.[43] The students used bullet points and subheadings within the pamphlet. During pre-testing, the residents said they liked being able to look down and know what they were about to read as well as not having to read a lot to get the information they wanted. The cover of written material is especially important as it is the only part that can be seen before the material is picked up.[43] The cover not only needs to be attractive, but also convey the purpose of the material.[43] Based on the residents' comments, the students believed

they successfully created a pamphlet cover the residents enjoyed. The residents said the photo and the questions gave them hope (see Figure 1 in Appendix C). The residents also asked if the photo on the front was of a family from Sojourner House because they felt they could relate to the family. (The photo was not of a Sojourner House family due to confidentiality issues.)

While the students' group was referred to as an educational group, much more occurred during the sessions than educating the residents, which was intentional. According to Sands and Solomon, educational groups can have a therapeutic or healing element to them.[40] An example of how the students incorporated more than education into the group sessions was their use of some principles from motivational interviewing, such as expressing empathy and developing discrepancy. Part of expressing empathy is accepting the residents' beliefs and behaviors, instead of judging them.[49] The students' use of this principle can be seen in their creation of an accepting, non-judgmental environment, their reflective listening, and their responses to the information the residents shared. The principle of developing discrepancy is when the residents recognize inconsistencies between their current or past status and important goals.[49] The best example of how the students used this principle was when they encouraged the residents to think about what they wanted their children's lives to look like in the future, what could prevent their children from being where they envision them, and how, as mothers, they could help make that vision a reality.

The students believed that a strictly educational structure would not have been effective with this population for several reasons. The students learned from the staff that groups cannot provide residents with information about how they could have negatively impacted their children without also providing them hope for the future. This type of discussion allowed the residents to use the information being provided to acknowledge that their past behaviors affected their

children, but that their future can be different if they remain in recovery. As previously discussed, the students wanted the residents to share their experiences and discuss how the information related to their lives. Designing the group to be purely educational with more of a lecture style would have eliminated essential elements of the group, the sharing and discussions. The students also believed that even though the residents wanted to learn the information, they would have been less interested if it was merely presented to them didactically. An example of a group that used this style is the parenting group mentioned earlier that focused on the different stages of development and Erikson's stages of psychological development. After this group, the residents said they did not pay attention to the information and tuned out the parent educator. Having observed the group, the students attributed the lack of interest, in part, to the style of the group. The residents were continually presented new information with little time allowed for discussion or sharing. By incorporating more than just education into the design of the group sessions, the students gave the residents opportunities to share their experiences, discuss how the information impacts them, and envision what they want their children's futures to look like.

5.1 CHALLENGES AND LESSONS LEARNED

While the response from the residents about the sessions was positive, the students faced some challenges. Even though the group sessions were mandatory, residents regularly came in late, left early, or missed sessions altogether due to outside appointments scheduled during session time. During Week Two, at one point, fewer than half of the residents were present. These absences occurred for the other groups at Sojourner House as well. Technically, the residents are not allowed to schedule outside appointments during the mandatory programming every morning

and early afternoon. The staff attempted to address this issue with the residents. The staff understands that sometimes the residents have no choice but to schedule an appointment during programming; however, the majority of the appointments for which the residents were missing groups could have been scheduled later in the day. Also, the same residents were continually absent. The main reason the students viewed this as a challenge was because the residents missed learning information they said they wanted to know. For instance, one of the residents who was graduating missed the discussion about how she plans to safeguard her child's environment upon leaving Sojourner House. The students included that discussion specifically because two of the residents were set to graduate, and the students wanted them to apply the information they learned about the effects of the environment on children to their lives outside of Sojourner House. Additionally, residents coming and going throughout the session was distracting to the residents who were present. When residents arrived late, the other residents wanted to know why they were late. Also, when residents arrived late, the students and other residents would stop and try to tell them what had already been discussed, taking time away from the session itself.

To mitigate these disturbances in the future, a rule could be included in the ground rules regarding late arrivals, saying if residents arrive late they should quietly sit down and pick up wherever the group is at upon their arrival. During the first session, the leaders could explain that each session will be reviewed at the end, so the residents who arrive late would hear a summary of what they missed and have an opportunity afterwards to get the information from the leaders. If side-talking occurs about why a resident was late, refer those involved to the rule stating "no side-talking" and say that they could talk after the session.

When holding a group in any residential setting, especially a residential treatment program, the emotions of the residents in the house carry into every group. One challenge was

how the environment or atmosphere of Sojourner House made its way into the group sessions. This was most evident in Week Three. When several residents were facing personal issues, participation and interest decreased because they were focused on their own issues and not the session. If there was tension amongst the residents, all of the residents lost interest and focus on the information at hand. While this can occur in groups held in different settings, the students felt it was more of a problem and more apparent due to the setting in which the residents were around one another 24/7. The best method of addressing this problem is by mediating the issue at hand. After Week Three, Ms. Sharon told the students how important it can be to clear the air before starting a session by asking the residents if there is anything bothering them or anything they would like to discuss.

Another challenge the students faced was the variation in the amount of time they had to hold the session. The first week the students had planned around the allotted 60 minutes, only to find out they had 120 minutes instead due to staff vacation. The session was too long to keep the residents focused, especially with a smoke break occurring halfway through. Week Two was shortened by 20 minutes because the staff had the residents address other issues before the actual session got started. In order to get through the entire session, the students felt rushed. Some information was not shared with the residents because time ran out. This variability showed the importance of being flexible and working with the time that is given. From their observations, the students knew a day at Sojourner House never went as expected or planned. The students experienced this firsthand while leading their group sessions.

The students learned the importance of appropriate visual aids and how easy it is to assume that others will interpret them in the same way as they have. During the Week Three session, one of the PowerPoint slides with true or false statements related to the environment the

children lived in had a picture of a cluttered, disorganized, and dirty room on it. From the residents' responses to the statement, the students realized the picture influenced their responses. Rather than think of the whole environment (physical, emotional, mental), the residents focused on whether or not a home was kept clean and organized. With the help of one of the residents, the students explained that the environment was more than the physical. The students knew what they wanted the picture to represent but did not consider that the residents would interpret the picture differently. In the future, rather than risk misinterpretation, the picture should be removed from the slide. This experience also reinforced how important pre-testing is for print material. In the group setting, the students had an opportunity to explain what the statement meant; however, with print material they would not have had that option, and the information could have been misinterpreted. This situation also showed how important it is to create an environment where the participants are not afraid to share and ask questions.

6.0 CONCLUSION

6.1 THESIS SUMMARY

Addiction is considered a chronic, multifaceted disease, with the actual substance use making up only one part.[1] Addiction occurs when use continues despite experiencing several negative consequences, it interferes with obligations such as work and relationships, and visible distress or significant impairment in functioning, physical dependence (tolerance and withdrawal), and a loss of control (unable to stop or reduce use) are present.[1] With addiction, substance use becomes the center of the addict's life, coming before family, work, and other responsibilities.[1] In 2011 eight percent (20.6 million) of the population aged 12 or older suffered from substance dependence or abuse in the past year, while only 10.8% of people aged 12 or older who needed treatment for illicit drugs or alcohol received it in a specialty facility (in-patient hospital, in-patient or outpatient rehabilitation facility, or mental health centers).[3]

An exact number of drug-dependent women is not available because the statistics are partially based on self-report, and the fear of stigmatization and discrimination associated with the disease of addiction prevents women from coming forward.[17] However, estimates show that of American women aged 15-44, up to 15% abuse alcohol or illicit drugs.[17] Women have a unique set of risk factors separating them from men such as a greater vulnerability to adverse physiological consequences[6, 8, 10, 18, 19], greater prevalence of mental health problems[5-8, 10, 11, 13-

[15, 17-26], histories of physical or sexual abuse[5-8, 10, 11, 13, 15, 17-24], serious medical problems[5, 8, 14, 15, 18, 19, 22], poor nutrition[18, 19, 22], relationship problems[6, 18, 19, 22], lack of employment skills[13, 22], inadequate housing[11, 22], and deficits in social support[7, 8, 18, 19, 21, 22]. Estimates also show nearly 90% of all drug-dependent women are of childbearing age.[16]

Maternal addiction is on the rise in the United States and is a serious issue affecting parenting.[19] Up to 70% of women in treatment have children.[19] In addition to the unique needs they have as women, these women also have unique needs as mothers.[19] Mothers suffering from addiction may have a difficult time providing a stable, nurturing environment for their children due to their addiction and life circumstances often brought on by their addiction, such as economic and social problems.[18, 19] Some of the risk factors these children face are low income status of the mother, low maternal education, maternal mental illness, instability of caregivers, residential instability, child abuse and neglect, little father involvement, and experiences in foster care.[17] The individual risk factors are important, but the accumulation or combination of these risk factors poses a greater threat to the child's development.[17] Being exposed to environments affected by maternal addiction puts children at risk for negative biological, developmental, and behavioral outcomes.[17, 18] In addition, mothers who use drugs or alcohol while pregnant put their child at greater risk for prematurity, impaired physical growth and development, and physical and mental health problems.[18] Mothers suffering from addiction also affect their children through parenting problems such as placing more importance on satisfying their addiction than on their own and their children's welfare, impairment from chronic drug use, and their emotional unavailability to their children.[19]

Due to the unique risk factors for women and mothers suffering from addiction, researchers, clinicians, and policy makers recommend that substance abuse treatment address the

mother's physical, social, and mental health needs as well as the child's needs by integrating services.[18, 20] Treatment programs for both mothers and their children provide an environment where mothers can address their addiction and work on recovery while developing parenting skills and rebuilding their lives with their children. Integrated treatment programs offer services such as group and individual addiction treatment, maternal mental health services, trauma treatment, parenting education and counseling, life-skills training, prenatal education, medical and nutrition services, child care, children's services, and aftercare.[18, 19] These treatment programs represent an opportunity to break the intergenerational cycle of addiction and dysfunction and improve child outcomes and parenting.[18, 19]

Two graduate students involved in Bridging the Gaps, an internship program working with community organizations serving underserved populations, were assigned to Sojourner House, a faith-based, in-patient residential drug and alcohol treatment facility for women with children, which helps addicted mothers learn how to break the intergenerational cycle of poverty and chemical abuse while rebuilding damaged relationships with their children. The students observed treatment groups and held informal discussions with the residents and staff, identified a need for the residents to learn more about the effects of maternal addiction on children, and developed and led a weekly group lasting four weeks. The four sessions each had different topics focusing on the exploration of the residents' pregnancy experiences, possible physical features of babies exposed to drugs/alcohol in utero, possible behavioral features of children affected by maternal addiction, and stress relief. The students also developed a pamphlet complementing the information presented in the group sessions. The students based the development and facilitation of the sessions and the pamphlet on guidelines from the literature (see Chapter 3).

While the residents stated they benefited from and enjoyed the students' weekly group sessions, the students faced some challenges. One challenge was the attendance of the residents. Despite the sessions being mandatory, residents missed sessions, left early, or arrived late because of the scheduling of outside appointments. Also, the time for each session varied despite the original allotted times being the same. If staff needed to discuss an issue with the residents, time was taken from the session leaving less time to cover the material. Due to the nature of the setting, the atmosphere of the house affected the dynamic of the group sessions. If something happened at the house to affect the mood of the residents, the collective mood carried into the sessions, affecting interest and participation.

6.2 LIMITATIONS

There are several limitations of this project. Everything about the project, from the overarching themes to the information in the individual sessions, focused on the specific needs of Sojourner House and the residents there at the time. Therefore, the project and its results are not generalizable. The needs of the residents in an in-patient treatment program for women and their children in a Pittsburgh neighborhood may not match the needs of a similar program elsewhere. The needs of the residents at Sojourner House during the summer of 2012 may not even be the same as the needs of Sojourner House residents in the spring of 2013. Additionally, the residents' response to the sessions is unique to this particular group of residents.

Another limitation is that no formal evaluation of the group took place. All of the feedback occurred through informal discussions. The residents did not complete pre- or post-test evaluations to measure any knowledge gained and retained or increased feelings of

empowerment provided through the weekly group sessions. The students developed a pre- and post-test but did so after holding the group.

Low attendance for a complete session is also a limitation. While attendance for at least a portion of a session averaged about 84%, attendance for an entire session was lower, averaging about 61%. The group sessions were designed based on the residents' wants and needs with each session tailored to their discussions. The residents who did not attend sessions in their entirety missed discussing information that they said they wanted to learn about. A portion of one session was designed to address the needs of two residents graduating from the program, but only one of the residents was present for the discussion.

The use of the pamphlet as complementary material to the group has the potential to be a limitation in the future. If the staff at Sojourner House does not replicate the group for any reason, the pamphlet will stand alone. The pamphlet was designed to be part of the intake packet for new residents with the idea they would be participating in the students' group during their stay. The information in the pamphlet can stand alone but does not offer the amount or the detail provided in the group sessions. Without the information presented to the residents in the group sessions, the residents may be more likely to disregard the pamphlet.

6.3 FINAL THOUGHTS

Mothers suffering from addiction not only have unique needs as women, but also as mothers. Treatment programs need to recognize and address these unique needs. Integrated treatment programs attempt to do this by addressing the mother's combined physical, social, and mental needs and the needs of her children. These programs benefit mothers suffering from the disease

of addiction more than a traditional treatment program. Not only are mothers working on recovery and rebuilding their lives, they are also learning life-skills and parenting skills, which in turn positively affect child outcomes. Including the children in treatment increases the mother's odds of entering treatment and allows any of the child's behavioral or developmental problems to be addressed. The children of mothers suffering from addiction are not untouched by the disease. The children are also rebuilding their lives along with their mothers. By treating the mother and the child, these integrated programs are attempting to break the intergenerational cycle of addiction in ways not addressed by other treatment options.

Sojourner House provides an important service to mothers suffering from the disease of addiction and their children by offering an integrated program. The main concern of the Sojourner House staff is how to improve the program for the benefit of the residents in order to increase the residents' success rates. The staff wants to give the residents as much knowledge and counseling in the six months as possible. The students recommend the staff continue to hold the weekly group they developed as needed based on incoming residents. If the staff feels that the needs of the new residents are not reflected in the information presented in the group, the students encourage them to ask the residents what they would like or what they feel is missing from the program. Based on the responses, the staff should develop a weekly group to address the needs of the new residents. By incorporating the group into the programming, the staff can show the residents that their ideas and opinions are worthwhile.

With the rate of drug use on the rise and a significant percentage of women in treatment being mothers, recovery programs aimed at mothers suffering from addiction need to continue to exist and increase in availability. Integrated treatment programs, such as Sojourner House, have been designed to address mothers' barriers and to meet their needs and those of their children.

Funding sources are being affected by the current economic state of the country, making understanding the importance of integrated treatment programs even more crucial. Continued funding for these programs is essential, so they can continue to be available to mothers suffering from addiction and provide a vital service to them and their children.

The educational group needs to continue at Sojourner House as long as it meets the needs of the residents. Teaching the residents how maternal addiction affects children is an important part of developing their parenting skills and provides an opportunity for them to become better mothers in the future, which in turn betters the lives of their children.

APPENDIX A

WEEKLY GROUP SESSION OUTLINES

The following session outlines represent adapted versions of the original outlines used by te students. The adapted outlines were created after the completion of the weekly group sessions, and therefore, include examples from the discussions in the students' groups. The outlines also contain instructions regarding the pre- and post-tests developed after the student-led sessions completed.

A.1 WEEK ONE

Title/Theme: Exploration

Outline:

1. Hand out the pre-test to the women. Explain that it is ok if they do not know all the answers. They will learn this information in the empowerment groups.
2. Give an overview and explain to the women what the mission and vision is of the group.
    a. Explain that this will be a weekly group. Your discussions from this group will help develop/tailor next week's group.
    b. Explain where the idea for this group came from. The group is based on the ideas and feedback from previous residents of sojourner house.
    c. **Mission/Vision:** To equip women with the necessary tools to help their children overcome possible impacts of maternal addiction, and to empower women to

break the intergenerational cycle of addiction in order to move the family into wholeness.

d. Hand them each a copy of the mission/vision statement, have them read it, and ask them what it means to them. (What would wholeness look like in your family?)
    i. As they discuss their interpretation of the mission statement, write their responses on the board at this time.

3. Ask the women if they have any questions before moving on.
4. Let the women know this is a safe and non-judgmental environment
5. Allow the women to establish ground rules for their empowerment group (this will help them self-regulate).
    a. Write the rules on the easel and display them each week.
    b. The rules that former residents came up with are as follow:
        i. Raise your hand
        ii. Share the time
        iii. No side talking
        iv. No cutting people off
        v. Respect the ideas of others
        vi. One person speaking at a time
        vii. Stay relevant to topic
        viii. Raise hands to speak
6. In this group we will be talking a lot about being resilient. Tell them what we mean when we say resilient. An easy definition: To bounce back. Helping you and your children bounce back from any possible difficult life circumstances you may have experienced at one time or another. (Resilience is what allows you to be whole). All the women are resilient just by being in the house and working on their recovery. Allow the women to discuss resiliency in their own terms.
7. Ask the questions: Tell me about your pregnancies. What were some good things about it? What were some bad things? How does that make you feel?
8. What can you do about those feelings?

A.2 WEEK TWO

Title/Theme: External Features of Babies Exposed to Drugs/Alcohol: Education and Hope

Outline:

1. Begin with a brief summary of what was covered last week. Ask if anyone can remember?
   a. Reread mission statement.
   b. **Mission/Vision:** To equip women with the necessary tools to help their children overcome possible impacts of maternal addiction, and to empower women to break the intergenerational cycle of addiction in order to move the family into wholeness.
   c. They thought about what this meant to them and had some great responses. We talked briefly about what we mean by resiliency and talked about some of their pregnancy experiences.
   d. Refresh the guidelines they wrote for themselves last week.
2. Distribute handout with the questions below. Items #3 and #4 are on the handout
3. Ask: In 5 years, how would you like your child's (children's) life(lives) to look?
   a. Give them time to answer/write it down. They keep this to themselves for now.
4. Utilize PowerPoint (on flash drive). Go through the picture slides of 3 different infants. (From left to right on the slide: Baby #1 fetal alcohol syndrome, Baby #2 exposed to opiates (methadone), and Baby #3 "healthy".)
   a. Photo of exposed babies next to a photo of a healthy baby (same gender, age and race).
      i. Tell women to break into small groups. Size depends on # of women present.
      ii. Give them 15 minutes to: Discuss similarities/differences between the three photos. What could have caused the similarities/differences?
      iii. One woman from each group reports back.
   b. Engage: Tell them one baby was exposed to alcohol and one was exposed to opiates. Based on what was reported back, ask them which child from the picture has been exposed to alcohol/opiates? And why?
   c. Give them the external features of each baby (alcohol and opiates). Have facts on hand about crack/cocaine-exposed babies.
5. Remind them of the "where they see their child" question. What could hinder your child from being where you envision them in 5 years? Think about your answer for this. Be ready to share in next week's group.
6. Summarize everything that was discussed before ending the group.

*Note: Exposure to alcohol doesn't mean you have to be an alcoholic.

Link to article about Baby #2 (methadone) – http://www.stuff.co.nz/national/3324466/Baby-died-after-agencies-failed-to-see-signs

A.3 WEEK THREE

Title/Theme: Possible Behavioral Features of Children Affected by Maternal Addiction: Education and Hope

Outline:

1. Begin with a brief summary of what we covered last week.
    a. Reread mission statement.
        i. **Mission/Vision:** To equip women with the necessary tools to help their children overcome possible impacts of maternal addiction, and to empower women to break the intergenerational cycle of addiction in order to move the family into wholeness.
    b. Ask if anyone can discuss what was learned/explored in last week's group
        i. Discussed similarities and differences between the pictures of the babies shown on the screen and why those similarities/differences exist.
        ii. Identified which baby was exposed to alcohol and which was exposed to opiates (methadone) and why.
        iii. Discussed the pictures of the babies and facts about the external and physical features of babies exposed to various drugs and alcohol.
    c. Review guidelines.
2. Utilize PowerPoint (on flash drive): go over the 4 *true and false* statements regarding children exposed to drugs/alcohol in utero and children of maternal addiction <u>one statement at a time</u>.
    a. Present first statement on the screen. (This statement is about children exposed in utero.)
        i. Have women read it and then share if they think it is true/false and why.
        ii. After they share, say the answer and why it is the answer.
            1. Facts for why it is true/false presented on following screen as you go over them.
    b. Present second statement on the screen and repeat i-ii. (The next 3 statements are about risk factors and the environment children are raised in.)
    c. Repeat the process for each of the statements.
3. Reintroduce the "In 5 years, how would you like your child's (children's) life(lives) to look?" and the "what could hinder your child from being where you envision them in 5 years?" questions. Give time to share and answer questions aloud.
4. Ask: What could you do as a mother to help them get there?
    a. Discuss.
    b. Direct towards any women ready to graduate: Once you leave Sojourner House, what safeguards will you put in place to ensure a secure, safe environment for your children?

A.4 WEEK FOUR

Title/Theme: Stress Relief

Outline:

1. Begin with a brief summary of what we covered last week.
   a. Reread mission statement.
      i. **Mission/Vision:** To equip women with the necessary tools to help their children overcome possible impacts of maternal addiction, and to empower women to break the intergenerational cycle of addiction in order to move the family into wholeness.
   b. Ask if anyone can discuss what was learned/explored in last week's group
      i. Went over 4 true and false questions. The first question was about behaviors of children who were exposed to drugs/alcohol in utero. The last three questions were about the role the environment plays in a child's behavior and the accumulation of risk factors.
      ii. Discussed how they wanted their child's life to look in 5 years, what could prevent them from getting there, and what they could do as mothers to help their child get there.
   c. Review guidelines.
2. Ask: What brings you the most stress (what are their life stressors)? It can be more than one thing.
   a. Have them come up and write their stressors up on the board. (ie: finances, parenting)
3. Ask: Is there anything up here that you can eliminate?(Maybe you can't eliminate anything.)
   a. If there are things that you cannot eliminate, what do you do with that?
   b. Discuss: It is good to be stressed out sometimes. Fight or flight. (Example: It is good to be stressed out if a bear is in the room because you need to get out! It is your body telling you that you need to run.) It is when you lose the balance that it becomes a problem.
4. Discuss the effects of stress on the body.
   a. Sometimes the root cause of an illness is stress-related.
   b. Stress may cause the body:
      i. Elevated blood pressure
      ii. Increased heart rate
      iii. Slower digestion and metabolism
      iv. Flood the bloodstream with chemicals like adrenaline and cortisol
      v. Tensed up muscles
      vi. Aches and pains, diarrhea or constipation, nausea, dizziness, chest pain, rapid heartbeat, frequent colds
5. Go over different stress relief techniques & give a scenario they relate to (refer to list of their stressors).

a. Recognize that you are overwhelmed. Recognize what is making you stressed. When you are already stressed it takes just one little thing to send you over the edge.
b. Breathing exercises - In deeply and out slowly. Let the tension flow out of your body.
    i. Slowly shrug shoulders to ears as you inhale, then drop them quickly as you exhale (4 times). We hold a lot of tension in our shoulders.
c. Laugh. Read or watch something that makes you laugh. Laughter is the best medicine. (Show a funny YouTube video if possible.) Listening to music. Soothing music or anything that lightens up the mood.
d. Take a time out for yourself. Go for a walk/run. Take a bubble bath. Ask for help. Asking for help is a sign of strength. It takes strength to be in touch with your weaknesses.
e. Seek inner peace through prayer and meditation. Say the serenity prayer. Practice positive thinking. Say daily affirmations aloud. (i.e.: “I trust my higher power completely, there is no need to worry”).

6. Recognize you are not the only one feeling stressed! You are not the only mom who has challenges with parenting. It is overwhelming for every mom at one time or another.
7. Let women know this is the last group. Wrap it ALL up!
8. Have women take the post-test.

Note: Cortisol (the Stress Hormone): Like adrenaline, it helps us deal with stress, but too much of it can be harmful. Excessive cortisol can be damaging to the body. Research has linked it to body fat storage around the abdomen. In turn, piling on the pounds around the belly can lead to heart disease.

APPENDIX B

WEEK TWO HANDOUT

Empowerment Group

Please take a moment to answer and/or reflect on the following question(s).

1. In 5 years, what do you want your child's (children's) life (lives) to look like?

2. In a group, discuss the similarities and differences between the photos displayed. What could have caused these similarities and differences?

Similarities	**Differences**

3. Reflect back on question 1. What could hinder your child from being where you want them to be in 5 years?

APPENDIX C

FIGURES OF THE PAMPHLET

The pamphlet was printed horizontally on paper size 8"x11". The pamphlet was folded vertically in half.

How has my addiction affected my children?

What can I do now?

You have the power
to help your child succeed.

Figure 1: Example of pamphlet cover page

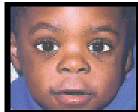
Empowering women to break the chain of addiction, in order to move their family into wholeness.

Possible Physical Features of Infants Exposed to:

Alcohol

Fetal Alcohol Syndrome

- Low birth weight
- Small head circumference
- Small eye openings
- Drooping eyelids
- Thin upper lip
- Upturned nose
- Underdeveloped ears



Various Drugs

Opiates, Cocaine

- Low birth weight & length
- Small head circumference
- Excessive crying
- Irritability
- Slower weight gain at first

Possible Behavioral Problems of Children Affected by Maternal Addiction:

- Inattention
- Hyperactivity
- Aggressive
- Impulsive
- ADHD

They may also:

- Lack control over their emotions
- Lack stable and supportive relationships with caring adults
- Do poorly in school
- Develop substance abuse problems of their own

Environment Matters: The environment children grow up in has more of an affect on behavior than whether or not the children were exposed to alcohol/drugs in the womb.

Stress Relief for Mom!

Parenting can be stressful.

It is overwhelming for every mom at one time or another.

How can you accept the challenges in a healthy way?

Here are some tips that YOU can use when you feel like you can't take it anymore.

1. Remember don't pick up or touch your child when angry!
2. Recognize when you begin feeling stressed and what's triggering it. Is it within your control?
3. Take a time out for yourself. Go for a walk/run. Listen to music. Read or watch something that makes you laugh. Take a bubble bath. Ask for help.
4. Take FIVE slow, deep breaths: slowly shrug shoulders to ears as you breathe in, then drop them quickly as you breath out.
5. Seek inner peace: pray and meditate. Say the serenity prayer. Practice positive thinking. Say daily affirmations aloud. (Example: "I trust in my higher power completely, there is no need to worry.")

The Effects of Stress on Your Body

Sometimes the root cause of an illness is stress related. Here are a few physical symptoms of too much stress!

- Elevated blood pressure
- Increased heart rate or chest pain
- Slower digestion and metabolism
- Tensed up muscles
- Aches and pains.
- Diarrhea or constipation, nausea, dizziness,
- Frequent colds

Figure 2: Example of the inside pages of the pamphlet

Resources for Mom

National Parent Helpline

Offers advice on parenting, helps you problem-solve and connects you to local resources.

1-855- 4A PARENT (1-855-427-2736)
HOURS OF OPERATION: Monday through Friday
10:00 AM PST to 7:00 PM PST (3 hours behind PA time)

Alliance for Infants

Serves children from birth to three years of age. Provides programming and activities for children who are at risk for developmental delays or show developmental delays.

412-885-6000

Early Head Start and Head Start

Both programs are income-based around the federal poverty guidelines, but there are exceptions to this. Early Head Start is for children from birth to three years of age. Head Start is for children ages three to five. Head Start is a pre-school program that gets children ready for kindergarten.

For services in Allegheny County and more information:
1-866-214-KIDS(5437)
alleghenycounty.us/dhs/headstart.aspx

Family Support Centers

Help families with young children remain stable. Offer a variety of services. No eligibility requirements except for their food pantries!

For more information on services and individual centers:
ulpgh.org/programs/family.asp
wpic.pitt.edu/research/adhd/familysupportcenters.htm

Healthy Start

Focus on infant health through improving the quality of life of families. Services are for pregnant women, new parents, or families with children up to the age of two.

412-247-4009
Helpline: 412-247-1000
healthystartpittsburgh.org

Figure 3: Example of the back page of the pamphlet

BIBLIOGRAPHY

1. Elizabeth Connell Henderson, M.D., *Understanding Addiction*2000: University Press of Mississippi.
2. Landry, M.J., *Understanding Drugs of Abuse: the process of addiction, treatment, and recovery*1994, Arlington, VA: American Psychiatric Publishing, Inc.
3. Administration, S.A.a.M.H.S. *Results from the 2011 National Survey on Druge Use and Health: Summary of National Findings*. 2012.
4. Substance Abuse and Mental Health Services Administration, *Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings*, NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2011.
5. Grella, C.E., Y.I. Hser, and Y.C. Huang, *Mothers in substance abuse treatment: differences in characteristics based on involvement with child welfare services.* Child Abuse Negl, 2006. **30**(1): p. 55-73.
6. Tuchman, E., *Women and addiction: the importance of gender issues in substance abuse research.* J Addict Dis, 2010. **29**(2): p. 127-38.
7. Knight, D.K., S.M. Logan, and D.D. Simpson, *Predictors of program completion for women in residential substance abuse treatment.* Am J Drug Alcohol Abuse, 2001. **27**(1): p. 1-18.
8. Marsh, J.C., T.A. D'Aunno, and B.D. Smith, *Increasing access and providing social services to improve drug abuse treatment for women with children.* Addiction, 2000. **95**(8): p. 1237-47.
9. Westermeyer, J. and A.E. Boedicker, *Course, severity, and treatment of substance abuse among women versus men.* Am J Drug Alcohol Abuse, 2000. **26**(4): p. 523-535.
10. Greenfield, S.F., et al., *Substance abuse treatment entry, retention, and outcome in women: A review of the literature.* Drug and alcohol dependence, 2007. **86**(1): p. 1-21.
11. Pajulo, M., et al., *Enhancing The Effectiveness Of Residential Treatment For Substance Abusing Pregnant And Parenting Women: Focus On Maternal Reflective Functioning And Mother-Child Relationship.* Infant Ment Health J, 2006. **27**(5): p. 448.
12. Green, C.A., *Gender and use of substance abuse treatment services.* Alcohol Res Health, 2006. **29**(1): p. 55-62.
13. Hser, Y.I., et al., *Gender comparisons of drug abuse treatment outcomes and predictors.* Drug Alcohol Depend, 2003. **72**(3): p. 255-64.

14. Campbell, C.I., J.A. Alexander, and C.H. Lemak, *Organizational determinants of outpatient substance abuse treatment duration in women.* J Subst Abuse Treat, 2009. **37**(1): p. 64-72.
15. Greenfield, S.F., et al., *Substance abuse in women.* Psychiatr Clin North Am, 2010. **33**(2): p. 339-55.
16. Vucinovic, M., et al., *Maternal and neonatal effects of substance abuse during pregnancy: our ten-year experience.* Yonsei Med J, 2008. **49**(5): p. 705-13.
17. Conners, N.A., et al., *Children of mothers with serious substance abuse problems: an accumulation of risks.* Am J Drug Alcohol Abuse, 2004. **30**(1): p. 85-100.
18. Niccols, A., et al., *Integrated programs for mothers with substance abuse issues and their children: a systematic review of studies reporting on child outcomes.* Child Abuse Negl, 2012. **36**(4): p. 308-22.
19. Niccols, A., et al., *Integrated programs for mothers with substance abuse issues: A systematic review of studies reporting on parenting outcomes.* Harm Reduct J, 2012. **9**: p. 14.
20. Niccols, A., et al., *Maternal mental health and integrated programs for mothers with substance abuse issues.* Psychol Addict Behav, 2010. **24**(3): p. 466-74.
21. Kerwin, M.E., *Collaboration between child welfare and substance-abuse fields: combined treatment programs for mothers.* J Pediatr Psychol, 2005. **30**(7): p. 581-97.
22. Sword, W., A. Niccols, and A. Fan, *"New Choices" for women with addictions: perceptions of program participants.* BMC Public Health, 2004. **4**: p. 10.
23. Marsh, J.C., D. Cao, and T. D'Aunno, *Gender differences in the impact of comprehensive services in substance abuse treatment.* J Subst Abuse Treat, 2004. **27**(4): p. 289-300.
24. Sun, A.P., *Program factors related to women's substance abuse treatment retention and other outcomes: a review and critique.* J Subst Abuse Treat, 2006. **30**(1): p. 1-20.
25. Lussier, K., M. Laventure, and K. Bertrand, *Parenting and maternal substance addiction: factors affecting utilization of child protective services.* Subst Use Misuse, 2010. **45**(10): p. 1572-88.
26. Pajulo, M., et al., *Role of Maternal Reflective Ability for Substance Abusing Mothers.* J Prenat Perinat Psychol Health, 2008. **23**(1): p. 13-31.
27. Suchman, N.E. and S.S. Luthar, *Maternal addiction, child maladjustment and socio-demographic risks: implications for parenting behaviors.* Addiction, 2000. **95**(9): p. 1417-28.
28. Strathearn, L. and L.C. Mayes, *Cocaine addiction in mothers: potential effects on maternal care and infant development.* Ann N Y Acad Sci, 2010. **1187**: p. 172-83.
29. Arria, A.M., et al., *Integration of Parenting Skills Education and Interventions in Addiction Treatment.* J Addict Med, 2012.
30. Jackson, A. and L. Shannon, *Examining barriers to and motivations for substance abuse treatment among pregnant women: does urban-rural residence matter?* Women Health, 2012. **52**(6): p. 570-86.
31. Little, B.B., et al., *Treatment of substance abuse during pregnancy and infant outcome.* Am J Perinatol, 2003. **20**(5): p. 255-62.
32. Ornoy, A., et al., *The developmental outcome of children born to heroin-dependent mothers, raised at home or adopted.* Child Abuse Negl, 1996. **20**(5): p. 385-396.

33. Hogan, T.M., B.J. Myers, and R.K. Elswick, Jr., *Child abuse potential among mothers of substance-exposed and nonexposed infants and toddlers.* Child Abuse Negl, 2006. **30**(2): p. 145-56.
34. Conners, N.A., et al., *Addressing the treatment needs of children affected by maternal addiction: challenges and solutions.* Evaluation and Program Planning, 2004. **27**(2): p. 241-247.
35. Jessup, M.A., et al., *Extrinsic barriers to substance abuse treatment among pregnant drug dependent women.* Journal of Drug Issues, 2003. **33**(2): p. 285-304.
36. Niv, N. and Y.I. Hser, *Women-only and mixed-gender drug abuse treatment programs: service needs, utilization and outcomes.* Drug Alcohol Depend, 2007. **87**(2-3): p. 194-201.
37. *Sojourner House*. 2011. September 15, 2012; Available from: http://www.sojournerhousepa.org/.
38. *Familylinks Agency Overview*. 2011. October 20, 2012; Available from: http://www.familylinks.org/index.php/familylinks-overview.
39. Substance Abuse and Mental Health Services Administration, *Treatment Episode Data Set (TEDS): 2009. Discharges from Substance Abuse Treatment Services*. DASIS Series S-60, HHS Publication No. (SMA) 12-4704. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2012.
40. Sands, R.G. and P. Solomon, *Developing educational groups in social work practice.* Social Work with Groups, 2004. **26**(2): p. 5-21.
41. Hepner, K.A., et al., *Building Recovery by Improving Goals, Habits, and Thoughts (BRIGHT-2).* RAND. 2011.
42. Demir, F., E. Ozsaker, and A.O. Ilce, *The quality and suitability of written educational materials for patients**. J Clin Nurs, 2008. **17**(2): p. 259-65.
43. Hoffmann, T. and L. Worrall, *Designing effective written health education materials: considerations for health professionals.* Disabil Rehabil, 2004. **26**(19): p. 1166-73.
44. Garcia, M., et al., *Development and validation of a nutritional education pamphlet for low literacy pediatric oncology caregivers in Central America.* J Cancer Educ, 2010. **25**(4): p. 512-7.
45. Reberte, L.M., L.A. Hoga, and A.L. Gomes, *Process of construction of an educational booklet for health promotion of pregnant women.* Rev Lat Am Enfermagem, 2012. **20**(1): p. 101-8.
46. IOM, *Health literacy: a prescription to end confusion*, 2004, National Academies Press Washington DC.
47. Helitzer, D., et al., *Health literacy demands of written health information materials: an assessment of cervical cancer prevention materials.* Cancer Control, 2009. **16**(1): p. 70-8.
48. Mayberry, J.F., *The design and application of effective written instructional material: a review of published work.* Postgrad Med J, 2007. **83**(983): p. 596-8.
49. Gold, M.A. and P.K. Kokotailo, *Motivational interviewing strategies to facilitate adolescent behavior change.* Adolesc Health Update, 2007. **20**(1): p. 1-10.