Perceived relationship quality as a predictor of women's dropout from substance abuse treatment

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Thesis submitted to the Faculty of the Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

Master of Science

In

Human Development

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July 23, 2002
Blacksburg, VA

Key Words: relationships, substance abuse, outcome, dropout, women

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ABSTRACT

This study examines how substance-abusing women and their partners perceive their relationship and how these perceptions are related to women's treatment completion.

The participant pool came from a larger study comparing the effects of adding couples therapy to traditional substance abuse treatment. All couples were in a committed relationship of at least six months duration. The sample was 166 mostly white and lower income women and their partners. The primary drugs of choice were opiates, alcohol, and cocaine.

Relationship perceptions were assessed prior to treatment by using the Kansas Marital Satisfaction Scale, the Dyadic Formation Inventory, and the Family Assessment Device. These scales all measure relationship quality as perceived by the subjects.

Perceptions of the women with substance abuse problems who completed treatment did not differ significantly from those who dropped out. The partners' perceptions did differ significantly. Partners of women who dropped out reported more couple commitment and more couple interaction as measured by the DFI, and higher overall general functioning, as measured by the FAD, than the partners of those who completed.

These findings suggest the importance of partners' involvement in, and support for, the woman's drug treatment.

ACKNOWLEDGEMENTS

First of all, to Eric McCollum, my advisor, professor, supervisor, boss, and friend- thank you for sticking by me, for treating me like an adult, and making me rise to the occasion when what I really wanted to do was quit. Thanks for telling me that quitting wasn't an option, and for believing that I could actually complete this thesis. You've helped me grow as a student, clinician, and person- thank you.

To my committee members Sandi Stith and Karen Rosen- thank you for remaining calm during my many moments of anxiety. Your kindness and calmness helped me immensely.

To my school family- I am so sad this is ending. To Carrie Penn- thanks for taking this walk at the same time I did- it was so nice having you by my side. I knew we would be friends the minute we met- thank you for ALWAYS understanding what I'm thinking and feeling. That trait will be a huge gift to your clients. To Erin Morgan- thanks for the walks, where you helped keep me moving along in both life and thesis. (Is there a difference?) One day Erin, I'll forgive you for moving so far away. To Jenny Matheson, thanks for making me laugh so hard I thought I might choke. And I'm serious about Snowshoe next year. And finally to Dave Ward, what an opportunity it's been becoming your friend. I can only hope to meet more people like you. Thank you for the experience.

Many thanks to my immediate family. To my brothers, thanks for being the greatest guys on earth. To my sisters- Pris, my sister, friend, confidante, and caretaker- thank you for teaching me that there IS life outside the box. Thank you also for teaching me the importance of self-care. I hope I can pass these lessons on to my clients. For Sal- what more could I want in a sister? It's wonderful having someone who really thinks

everything I do is a huge accomplishment. You keep me believing in myself! And Beth- wow- I owe you! Thanks for listening to me complain for hours about how "I just can't do this thesis". You continued to tell me I could, and came to take care of me in the final days. Thank you- I promise this visit will not be forgotten. And finally, Claud, who somehow as a little sister, continues to teach me about life, love, and kindness. Don't you know that's the BIG sister's job? Thank you for being the wonderful person and sister that you are.

To my dad- nothing I could ever write would approach the level of thanks needed for everything you've given me. I love you.

To my grandma, Kathyrn MacDonnell Pinto, you were the support system that got me through. You came when I needed you- thank you.

Finally, Mark. Thank you for calmly standing by me and supporting me through this program. Your unending belief in me is amazing. Thank you for your patience, your support, and your love. I can't wait to spend the rest of my life with you. "How *did* I get so lucky?!"

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Chapter 1: Introduction

Statement of the Problem

Substance abuse in our society is widespread, and data suggest the prevalence of women who abuse substances is quickly approaching that of men. Over 4 million women meet the Diagnostic and Statistical Manual of Mental Disorders (DSM) criteria for alcohol abuse or dependence (Cry & Moulton, 1993). The cost of substance abuse is financially and emotionally substantial for all those affected. According to a survey conducted by SAMHSA (Substance Abuse Mental Health Services Administration), 5.6 million women use an illicit drug each month (SAMHSA, 2000). Even more staggering is that over 15 million women binge drink (consume more than five drinks at a time) each month as well. The negative consequences of female substance abuse are immense and widespread. Healthcare, childcare, and family are areas that are negatively affected by women's substance abuse.

Women who abuse substances are at higher risk to be victims of minor marital violence (Leadley, Clark, & Caetano, 2000). From the National Family Violence Study, Kantor and Straus (1989) found that a husband's drunkeness, a wife's drunkeness, and low income are predictors for the wife to be abused. In general, decision making skills are a problem for many women with substance abuse problems, adding to the dangers of substance abuse (Brown, Melchoir, Panter, Slaughter, & Huba, 2000). For example, women who abuse substances may be more impulsive than non-substance abusing women, resulting in decisions that have long lasting effects in areas such as poor financial decisions, lack of appropriate childcare, and risky sexual activity. A large percentage of the substance abusing population also suffers from a mental disorder

(Kessler, Nelson, & McGonagle, Edlund, Frank, & Leaf, 1996; Reiger, Farmer, Rae, & Locke, 1990). Women tend to have higher rates of dual-diagnosis than do men (Reiger et al., 1990). Some of the typical co-existing disorders include depression, anxiety, bipolar disorder, schizophrenia, and personality disorders. Dually diagnosed women need more complex treatment than women suffering from substance abuse solely.

While males and females who abuse substance face many of the same risks, some health risks and consequences related to substance abuse are specific to women. As mentioned above, women with substance abuse problems are more likely to suffer dual diagnoses than are men. Women with two disorders are more likely to suffer physical and sexual abuse (Brown, Huba, & Melchoir, 1997). They may be in greater danger because of poor decision making skills, prior trauma, and lack of resources. Compared to non-substance abusing women, women who abuse substances have greater difficulty with health care needs, childcare and custody issues, vocational job training, legal assistance, sexuality and relationship problems, self-esteem issues, positive coping mechanisms, and obviously, substance abuse education (Chavkin, 1990).

Health and medical issues are other major concerns for many women who abuse substances. Many women who abuse substances suffer from more gynecological problems and often have complications with pregnancies and birth. Women with substance abuse problems are more likely to suffer from amenorrhea, infertility, dysmenorrhea, and non-normal uterine bleeding (Cyr & Moulton, 1993). Stillbirths, premature labor, low birthweight and fetal alcohol syndrome are additional risks for the baby.

Childcare and custody issues are also a major concern for many women with substance abuse problems. Women are considered the primary caregivers in the family and are expected to take care of their children. Women who abuse substances are at greater risk to be involved with Child Protective Services (CPS) than non-substance abusing women (Noel, McCrady, Stout, & Fisher-Nelson, 1991). Clearly, the children of these drug abusing women suffer immensely as well, both physically and emotionally.

Women who abuse substances suffer more physical problems, as do their infants. Children of mothers who used cocaine while pregnant often have many complications, including lower birth weight, congential abnormalities, premature births, and perinatal deaths (Handler, Kistin, Davis, & Ferre, 1991). These children are also at higher risk for developmental difficulties later in childhood (Chasnoff, Griffith, Freier, & Murray, 1992). Clearly, substance abuse may affect women's ability to parent their children well, often leading to increases in anxiety and depression (Bry, 1983).

For those women who seek help, attempts at treatment are often unsuccessful. Women drop out of intensive treatment programs or relapse at a higher rate than men (Arfken, Klein, di Menza, & Schusterl, 2000). Boylin, Doucette, and Jean (1997) found that women with substance abuse problems stay an average of one week less than males do (Boylin, Doucette & Jean, 1997). Because it has been shown that more days in treatment lead to better outcome, it is important to find what leads women to drop out of treatment more frequently than men.

Several factors appear to influence women's completion in treatment. First, it has been reported that women who present for treatment have greater psychological distress, more medical problems, lower income, and greater addiction severity than men (Lundy,

Gottheil, Serota, Weinstein, & Sterling, 1995). The stress of all of these factors may make them more likely to end treatment prematurely. Issues surrounding a lack of support may contribute as well. Factors such as their partner not being supportive of their treatment, their care-taking role in the family, childcare problems, transportation problems, and financial problems often play a part in women dropping out of treatment (McCollum & Trepper, 1995).

Program design may also lead to women dropping out of treatment more often than men. Literature has suggested that lack of childcare, women often being outnumbered in co-ed group treatment (Zankowski, 1987), lack of women-only groups, and lack of case management services as some program components that lead to less than desirable outcome for women. Davis (1994) found anger to be the strongest predictor of dropout, yet other studies have found depression to be a large factor as well (Williams & Robers, 1991). Whether treatment programs address issues such as these may also affect outcome.

The underlying philosophy of substance abuse treatment is another issue that makes traditional treatment less hospitable to women. Traditional substance abuse treatment is male oriented because substance abuse has primarily been viewed as a male problem, and therefore resources for treatment have been geared towards males. Treatment geared to women who abuse substances is needed. Some research shows women reported having female only groups was the most important factor in their treatment (Reed, 1987). This may be on account of communication styles in group treatment, where women may not be as assertive as men (Argyle, Lalljee, & Cook, 1968). This could lead to women with substance abuse problems feeling invalidated and/or self-

critical. Whether women feel safe enough to share their stories could also contribute to why female only groups seem to be such an important factor to women (McCollum & Trepper, 1995). Additionally, since women suffer higher rates of depression and anxiety than do men, they may need treatment that incorporates these issues (Brown, Huba, & Melchoir, 1995).

Another possible problem with the male oriented treatment is the 12-step approach, which requires the individual to surrender to a higher power. Some suggest this may be more appropriate for males, who traditionally have more power. For those who do not come from a position of power however, such as women, it may be counterproductive to suggest that these women should give up what little power they have as a means of gaining sobriety (Nelson, McCollum, Wetchler, Trepper, & Lewis, 1996).

Male oriented treatment is very individually focused. The male oriented treatment approach helps the client to understand how their substance abusing behavior affects their relationships (Nelson et al., 1996). Few programs however, focus on how treatment affects their relationships, or how relationships affect treatment. This could be especially important to women, given the importance of relationships in their lives. Often treatment programs will encourage those who abuse substances to discontinue relationships with others who may be using or may somehow be detrimental to their recovery. This however, discounts the importance of relationships in the lives of women. It may be important to help women by incorporating a relationship component into the treatment, helping them both gain sobriety and help her make her own decisions regarding the current relationships in her life.

Finally, and most importantly for the present study, there is an increasing body of literature that suggests women's intimate relationships have a major impact on both their drug use and their treatment outcome. As mentioned above, the importance of relationships to women in general has been well-documented (Miller & Stiver, 1993). Women's lives tend to focus on their partner relationships, their children, and their families. They are socialized to be caretakers and to focus on the needs of others before their own.

Given this emphasis on relationships, it's no surprise that relationship factors play a large role in women's substance abuse. Women are often introduced to their drug use by their partner, and their drug use is often influenced by their partner. Additionally, women are more likely to be influenced to use by their husband than the other way around (Gomberg, 1976).

Furthermore, there is a strong positive association between couple's drinking habits (Price & Vanderberg, 1980; Corbett et al., 1991). Most couples have similar drinking habits (Leadley, Clarke, & Caetano, 2000). It has been suggested that when partners drink together they have more harmony and happiness in their relationships than those who drink separately (Homila, 1998). Differences in drinking styles are associated with lower marital functioning, greater risk of problem drinking, and more adverse consequences for the female partners (Wilsnack & Wilsnack, 1990a,b). Furthermore, when there are major differences in alcohol consumption between partners, there are more serious relationship difficulties (Leadley, Clarke, & Caetano, 2000). Clearly, the partner relationship plays a large role in the world of women who abuse substances, both in regard to their substance abuse as well as their personal lives. As research indicates,

there is strong evidence that treatment for women with substance abuse problems should address a relationship component.

Rationale of the Study

As noted earlier, the number of women with substance abuse problems is rising. Substance abuse in women has serious consequences for women, her intimate relationships, her family, and society in general. It is also known that women drop out of treatment more frequently than do their male counterparts. This has serious consequences given that the longer a woman stays in treatment, the greater chance her recovery will be successful (Brown, Melchoir, & Huba, 1999).

Though the literature addresses a number of things that may lead women to leave treatment prematurely, no widely published study has addressed the part that a woman's intimate partner relationship plays in her successfully completing treatment. The role of intimate relationships is not acknowledged currently in treatment, despite the importance relationships play in the lives of women.

This study will investigate which intimate relationship characteristics help to predict dropout for women in drug treatment. The relationship characteristics to be examined are: marital satisfaction as measured by the Kansas Marital Satisfaction Scale (KMSS), general functioning as measured by the Family Assessment Device (FAD) subscale, and the partner dyad as it pertains to preference for the partner relationship over other social relationships, as measured by the Dyadic Formation Inventory (DFI).

Theoretical Framework

This study is guided by the framework of Family Systems theory which "should focus on interaction among family members rather than individual qualities" (Nichols & Schwartz, 1995, p.89). Family Systems theory was developed from the concepts of General Systems theory, which was developed by Ludwig von Bertalanffy. Bertalanffy believed that "a system was more than the sum of its parts" (Nichols & Schwartz, 1995, p.89). He proposed that "every system was part of a subsystem of larger systems" and believed it was important to look at how these systems influenced each other rather than only studying individual systems in isolation.

Family Systems theory was developed out of the idea of Bertalanffy's General Systems theory. The founders of family therapy took Bertalanffy's ideas and applied them to the family system. They examined the impact of the interaction between family members, rather than what happens within the individual system. This was a departure from traditional psychology, whose focus is on the pathology within the individual. Family systems theory looks to the relationships between family members for explanation of behaviors, and focuses on what happens *between* family members rather than simply within each member.

In this study, the relationship qualities between the substance abusing woman and her partner that may be contributing to her dropout versus her completion of treatment will be examined. Because substance abuse affects the entire family, and the partner relationship in particular, the Family Systems perspective makes sense in this study. How each member of the couple views the substance abuse, and how they react to it, has tremendous impact on how it will be treated. Furthermore, treatment also affects the

couple relationship, as changes are made both within the individual and within the interaction of the couple. How the couple views their relationship may be an important aspect in drug treatment.

Substance abuse is widespread in our society, and the number of women abusing substances is rising. Substance abuse effects many areas of women's lives, namely their health, their family, and their mental well-being. While women and men have many similar consequences to abusing substances, women have some that are unique to them. On account of this, current treatment does not seem to be meeting their needs, as women drop out of treatment more often than men. Dropout from treatment leads to poorer outcome. One of the items suggested to improve the situation for women is to include a relationship component in treatment, as the importance of relationships to women has been well documented. By examining the relationship aspect in treatment, the needs of women may become better met.

Research Questions

This study intends to answer the following research questions:

Research Question One

How do women who drop out of treatment differ in their perceptions of their relationship quality from women who complete treatment?

Research Question Two

How do partners of women who drop out of treatment differ in their perceptions of their relationship quality from partners of women who complete treatment?

Research Question Three

Is there a relationship between a female substance abuser and her partner's perception of their relationship quality and her dropout from drug treatment?

Chapter Two: Literature Review

This purpose of this study is to examine the perceived relationship qualities of women with substance abuse issues and their partners to see if there are characteristics that may be associated with attrition, or dropout, from substance abuse treatment.

This section consists of an overview of the literature on women and substance abuse. Specifically, the particular treatment needs of women with substance abuse problems are addressed. The important role that relationships play in the lives of women will be discussed. Finally, literature on attrition from drug treatment will be reviewed.

Women and Substance Abuse

Prevalance

Historically, substance abuse has been considered to be predominately a "male problem", in part because more men have had substance abuse problems than women (Hser, Anglin, & McGlothin, 1987). Men in fact do consume more alcohol, and have more alcohol related problems than women (Corbett, Mora, & Ames, 1991). Males make up 70-80% of the substance abusing population (Kandall, 1998). In their research on population drinking from 1981-1991, Wilsnack and Wilsnack (1995) report that fewer women drank heavily and 1991, and that women drinkers in general were drinking less often and in lower amounts in all five age groups they were measuring. However, in 4 of these 5 groups, they found that women were more likely to have reported feeling drunk during this time (Wilsnack & Wilsnack, 1995). Despite these findings, it has been suggested that women seem to be catching up in their abuse of alcohol and drugs (Grant,

1991). The percentage of females with substance abuse problems is rising, having increased from 22% in 1982 to 28% in 1990 in the total population (Schmidt & Weisman, 1993).

It is estimated that 4.5 million women meet the DSM-III-R criteria for alcohol abuse or alcohol dependence (Cyr & Moulton, 1993). It is also estimated that women make up roughly 1/3 of all drug abusers. Women however, continue to be outnumbered in treatment, with a ratio of 2.3 : 1 for men to women entering drug treatment, and 3 : 1 for alcohol treatment (SAMHSA, 2000).

Hilton reported in his 1998 study that between 1964 – 1984, the percentage of women between 21-34 who reported drinking 60 or more drinks a month rose from 4% - 7% (Hilton, 1988a). Among this group, women who binge drink (consume 5 or more drinks in a sitting, 5 or more times in the past month) also rose from 3% to 8% (Hilton, 1988). This indicates that rates of heavier drinking for women seem to be on the rise. Hilton also found for women between the ages of 18-20, there was an increase in light drinking (consuming less than .22 ounces per day) and there was an increase in women who first began drinking between the ages of 50-64. These changes may be accounted for by the cultural changes in society.

One possibility is that the change in societal norms is now making it more acceptable for women to drink (Cyr & Moulton, 1993). Alternatively, women are now working more outside the home, and their use of alcohol may be becoming more visible. Hammer & Vaglum (1989) suggest that women in male dominated jobs consume more alcohol than women in female dominated jobs. This could be due to trying to "fit in" with

their male colleagues, or due to the socialization of the job. Whatever the cause, the rate of substance abuse among women seems to be rising.

Research

Most of the research on substance abuse has been conducted on males (Moras, 1998), and there is a significant gap in the research on women with substance abuse problems. Part of this lack of research is also due to the fact that other problems in women, such as heart disease, cancer, etc. are seen as more "acceptable" problems for women to have (Finnegan, 1998). Unfortunately, as most of the substance abuse research has focused on men, this has left the needs of women with substance abuse problems unattended to in treatment.

What little research has been conducted on female substance abuse has mainly focused on pregnant women. This is important research, especially given that the most intense drug use occurs during childbearing years (Kandel, Warner, & Kessler, 1998). However, research on non-pregnant women with substance abuse problems is also needed (Millstein, 1995). As noted earlier, substance abuse treatment is based on what work for males, yet this doesn't necessarily meet the needs of women (Kempfer, 1991). Research on successful treatment programs for women is necessary so that their needs can begin to be met. One of the reasons women seem to be left out of research is that they are not as visible as male alcoholics (Annis & Liban, 1980). Men may seem more visible because they do their drinking more in public, and have more public consequences such as job related problems and problems with the law. Women tend to do their drinking in private, and their consequences may not be as visible as their male counterparts.

Effects on Women

Physical Effects

Alcohol affects women differently than it affects men. First of all, women become intoxicated with less alcohol than men. This may be due to the fact that women have less body water content than men, which leads to a higher blood alcohol level than men with the same number of drinks, even when taking body weight and size into account (Wilsnack, 1995). Another reason women may become intoxicated more easily than men may be because the enzyme that metabolizes alcohol in the stomach is not as active in women. Finally, it has been suggested that the hormone levels during a women's menstrual cycle may affect the rate the alcohol is metabolized, making it easier for women to become intoxicated (Lieben, 1993). These biological differences between men and women cause women to be more vulnerable to the effects of alcohol use. The result is that women are at risk with less alcohol consumed, and negative consequences of drinking may come with smaller amounts of alcohol consumed.

Higher vulnerabilities to alcohol-related diseases have led researchers to believe that women "telescope" more than men. Telescoping is the progression to serious complications of alcoholism after a shorter time of heavy drinking compared to men (Cyr & Moulton, 1993). This may explain why women with substance abuse problems have a mortality rate 50-100% higher than do men (Hill, 1982).

Women with substance abuse problems are more vulnerable to certain health risks/illnesses than men with substance abuse problems and non-substance abusing females. Women with substance abuse problems are at increased risk for breast cancer (Smith-Warres, 1998). Interestingly, despite reports in the popular media that state that 1-

2 drinks per day lowers the risk for coronary heart disease (Gavaler, 1993), current research has shown that heavier female drinkers have the same rate of alcohol related heart disease as men. This is alarming given that women consume 60% less alcohol than men (Urbano-Marquez, Estruch, Fernandez-Sola, Nicholas, Pare, & Robin, 1995). Women with substance abuse problems are also much more likely to suffer from alcohol hepatitis and to die from cirrhosis of the liver (Hall, 1995). Once again this is surprising given that women consume less alcohol than do men. Women also develop alcohol induced liver disease more often than men, and they do so in less time and with smaller amounts of alcohol than men (Tuyns, 1984). Women with substance abuse problems are at higher risk for osteoporosis and hypertension as well (Cyr & Moulton, 1993). Finally, women with substance abuse problems are at higher risk than men for alcohol induced brain damage. This may be due to a smaller brain region which coordinates multiple brain functions (Hommer, 1996).

Women with substance abuse problems also have more frequent gynecological disorders including amenorrhea, dysfunctional uterine bleeding, infertility, and pre-menstrual syndrome. In issues related to pregnancy, women with substance abuse problems are at greater risk for spontaneous abortions, stillbirths, premature labor, lower birth weight of their children, and risk of fetal alcohol syndrome in their children (Cyr & Moulton, 1993).

Dual Diagnosis

One psychosocial factor affecting women with substance abuse problems is the high rate of dual diagnosis. When an individual suffers from the combination of a

psychiatric disorder in addition to a substance abuse disorder, it is referred to as dual-diagnosis. There is a strong association between alcohol and depression in women (Cyr & Moulton, 1993). Women with substance abuse problems also are more likely to suffer from anxiety, bipolar depression, schizophrenia, and personality disorders. Women with substance abuse problems are at high risk of being dually-diagnosed, with an average of 65% of female substance abusers being dually-diagnosed (Brown, Melchoir, & Huba, 1999).

There are a variety of concerns for the dually diagnosed female (Laudet, Magura, Vogel, & Knight, 2000). Having a dual diagnosis makes being a victim of physical or sexual abuse much more likely (Brown et al., 2000). Economic issues present many problems because dually diagnosed females are often unemployed and have little education. They also tend to suffer from social problems in terms of having difficulty with personal relationships, including marital relationships. These women often have poor social skills, which contribute to their relationship difficulties. Finally, substance abuse complicates mental health treatment because dually diagnosed clients often do not comply with their treatment, do not take their medications, have an increased risk of suicide, have various legal problems, have lack of adequate housing, and have a higher number of emergency room visits (Laudet et al., 2000). Clearly, these additional problems make successful treatment outcomes more difficult. Indeed, having a dual diagnosis is a predictor of negative treatment outcome (Laudet et al., 2000). The dually-diagnosed client requires more complex treatment than traditional substance abuse treatment alone provides.

Psychosocial Risks

In addition to these physical and psychiatric problems, women with substance abuse problems are also at greater risk for many psychosocial problems. One of the most significant risks related to women's substance abuse is that of family violence. It is estimated that 1/3 of the reported incidents of violence between couples involve alcohol use by one of the partners (Leadley, Clark, & Caetano, 2000). Women's use of alcohol increases their risk to be a victim of minor marital violence (Kantor & Straus, 1989). This finding is supported by that of Leonard and Senchak (1993), who found that problem drinking in wives is linked to husband perpetrated violence. In addition to risk of physical violence, a survey of female college students reported a relationship between how much alcohol the female drinks per week and their experiences of sexual victimization. The more alcohol consumed, the higher the risk of being sexually victimized (Gross, 1998). Alcohol use clearly puts women at higher risk for physical and sexual victimization.

Another area of psychosocial difficulty is the well being of the families of women with substance abuse problems. One of the risks for the child of a women with substance abuse problems is that of child sexual abuse. Many women with substance abuse problems were sexually abused themselves as children. Unfortunately, the children of female substance abusers are also at higher risk to be sexually abused. Ammerman (1999) found that parents with alcohol or other drug abuse problems were more likely to abuse their children than parents who do not have drug related problems. Furthermore, children of parents with alcohol problems may be at greater risk for sex abuse (Miller, Maguin, & Downs, 1997). Fleming (1997) found that having a mother with substance abuse

problems is a risk factor for a child to be sexually abused by a non-family member. This may be due to substance abuse interfering with the mother's ability to effectively protect their child and provide a safe environment (Miller et al., 1997).

Another area where the family of a female with substance abuse problems may suffer is that of finances. Money that would typically go towards basic needs such as food, shelter, and clothing, may be supporting the alcohol or drug use instead. There may also be criminal activity in order to support the addiction (Bays, 1990). If the female substance abuser is unable to hold a job because of her drug use, that too would certainly impact the well being of the family. Women in our society are expected to be the caretakers of the family (Covington & Surrey, 1997). The children of women with substance abuse problems often do not receive the necessary care required for healthy development, as their mother's attention and money are given to their substance abuse.

Women with substance abuse problems are also at greater risk to be involved with Child Protection Services than women without substance abuse problems. Research has shown that there is a greater risk of the children being removed from the home if the mother is abusing alcohol, even if the father is not abusing and lives in the home as well (Noel, McCrady, Stout, & Fisher-Nelson, 1991). It is not surprising that women with substance abuse problems have many stressors in many different areas of their lives that treatment needs to be able to address. In light of the many different areas in the lives of women that can be affected by substance abuse, it is imperative that such issues be addressed in treatment.

Effects of Substance Use During Pregnancy

As mentioned earlier, much of the research on women's substance abuse has focused on pregnant users. This is in part due to the "crack baby" epidemic in the 1980's. A nationwide survey by NIDA (National Institute on Drug Abuse) in 1992 found that mothers of 5% of all babies born had used illicit drugs during pregnancy. Twenty percent of these mothers had used cocaine (National Institute on drug Abuse, 1996). The babies of crack abusing mothers had serious complications such as low birth-weight, premature births, congenital abnormalities, as well as death (Handler, Kistin, Davis, & Ferre, 1991). Those babies who survived were at risk for incomplete immunizations and inadequate health care due to their mother's drug use and consequent inability to care for their children (Forsyth, Leventhal, Qi, Johnson, Schroeder, & Votto, 1998). The babies were also at risk for poorer developmental outcomes in childhood compared to those who were drug-free infants (Chasnoff, Griffith, Freier, & Murray, 1992). The long-term psychosocial effects on children exposed to alcohol in utero include learning disabilities, hyperactivity, impulsivity, and antisocial behavior. Mental retardation is also a large risk. Long-term effects of cocaine include delays in fine motor skills and visual coordination (Bay, 1990). The economic costs for drug-exposed babies was high, with an estimated $6,965 additional costs per child for caring for newborn babies with cocaine exposure (Forsyth et al., 1998). For those babies born to women with alcohol problems, there is a significant risk of Fetal Alcohol Syndrome. Clearly, the babies of women with drug problems have higher risks of physical problems.

Specific Needs of Women in Treatment

There are specific issues that pertain to women with substance abuse problems that need to be addressed in treatment. As mentioned earlier, women with substance abuse problems often also have mental health issues (Egelko, Galanter, Dermatis, & DeMaio, 1997; Arfken, Klein, DiMenza, & Schuster, 2001). It has also been reported that women with substance abuse problems present with more psychological problems when they enter treatment than do men (Arfken et al., 2000). As mentioned above, they also have more medical problems, fewer job skills, and lower income than do males (Lundy & Gottheil, 1995). These issues must be addressed in order to help women be able to complete treatment.

Another need of women in treatment is for gender specific treatment groups to be provided. As mentioned earlier, substance abuse has been viewed as a male problem, and treatment has been developed according to the needs of men. Women are often outnumbered in such support groups. Furthermore, the difference in communication styles between men and women may create barriers for women seeking help. Men tend to be more assertive in their communication styles, and tend to interrupt more often (Argyle, Lalljye, & Cook, 1968). Women may not feel safe enough to share their stories in a group with males present (McCollum & Trepper, 1995), especially stories concerning past violence and abuse at the hands of men. Indeed, research has shown that women reported having female only groups as the most important factor in their treatment (Reed, 1987).

Another consideration for treatment of women with substance abuse problems is that of childcare and other care-taking responsibilities. Many treatment facilities do not

have facilities for the children of the female substance abuser. Since many women are the primary care-taker for their children, this creates a huge barrier for many mothers. They are faced with the option to either receive substance abuse treatment or to care for their children. Paradoxically, they often lose custody of their kids to Child Protective Services or Social Services if they enter treatment, especially if they enter residential treatment. This neglect of the care-taking role of women creates an unacceptable barrier to women needing substance abuse treatment. McCollum & Trepper (1995), in their study on what makes treatment successful for women, interviewed women who had completed treatment to gain insight into treatment. One participant reported:

> "Having children made it hard because I didn't know what to do with my kids when I was gone. The family I had was really dysfunctional and I didn't want to leave them with family members. The family members that did have them when I went in for treatment, I felt strongly that they were abused. I ended treatment early several times [because of that] (p. 73).

Women are often *discouraged* from seeking treatment by family members if these family members believe the treatment may affect the woman's childcare responsibilities, (Kane-Cavaola & Rullo-Cooney, 1991). This lack of support from family members will clearly have a large impact on women accessing treatment.

Importance of Relationships

In her book, "The Dance of Intimacy", Harriet Lerner (1989) describes the responsibility that is placed on women in our society. "Caring about relationships, working on them, and upgrading our how-to skills have traditionally been women's domain" (p.4). Women are socialized to put their relationships at the center of their lives, and their lives are based upon their relationships with others. As Gilligan (1982)

describes in her book In a Different Voice, "women's sense of self and morality revolves around issues of responsibility for and care of other people." She explains that the responsibility women have for caretaking leads them to attend to "voices other than their own" (Gilligan, p.16). Furthermore, as Miller (1976) states, women not only define themselves in their relationship to others, they also judge themselves in their ability to nurture, caretake, and help. This emphasis on others may have a serious impact on women seeking substance abuse treatment if they feel treatment will jeopardize their relationships. This orientation towards relationships is in direct contrast to what men are socialized towards-- separation and independence. Traditional treatment does not take into account the central component of women's lives- that is, connection to others. This becomes painfully evident when one looks at how current treatment is so individually focused. Family meetings are considered an option in most treatments, despite their important contribution to the recovery of the client.

Women's relationships play a role in their substance abuse. Many girls are given their first drink or drug by the person they are emotionally involved with. Research has found that when women are in an intimate relationship with men who have substance abuse problems, the women are often introduced to drugs by their partner, and their drug use is often maintained by their partner (Anglin, Kao, Harlow, & Peters, 1987). Additionally, adult women may also use drugs to feel more connected with their using partner (Covington & Surrey, 1997). Research has also found that women are more likely than men to state their reason for drinking is due to marital instability and family problems (Williams & Klerman, 1984). Finally, women are not likely to risk their relationships in order to seek treatment, yet the female's relationships with both her

partner and her family will be affected by her entering treatment (Nelson et al., 1996). Clearly, many women with substance abuse problems develop and maintain their addiction within the context of their relationship.

The drinking pattern that forms between a couple has serious implications for their relationship. Leadley, Clarke, & Caetano (2000) found in their study of 1,614 romantic partners that that 69% of couples have similar drinking habits, and this can cause less conflict in their relationship than discrepancies in drinking. To find discrepant drinking styles, Leadley et al. asked how often and how much alcohol each individual drank. Homila (1988) found that husbands and wives who drink together have more harmony and happiness in their relationship than those who drink separately. Wilsnack and Wilsnack (1990a,b) found that couples with different drinking styles have poorer marital functioning. When their drinking styles are dissimlar, wives often have adverse consequences such as physical violence and more alcohol related arguments. It is important however, to acknowledge the drinking relationship of a couple, particularly since 73% of married men and 63% of married women drink (Hilton, 1991). The relationship and the substance abuse clearly affect each other, and this area needs to be given more consideration in treatment.

While research shows that similar drinking styles are less disruptive to relationships, clearly alcohol and drug use plays a significant role in marital problems as well. As the female's use becomes more severe, sexual problems such as sexual dysfunction, problems with orgasm, sexual dissatisfaction, and vaginismus with her husband increase as well (Wilsnack, 1984; Noel, 1991). Convington and Surrey (1997) report "alcohol and drugs [ ] decrease physiological arousal and interfere with orgasm in

women" and "can affect hormonal cycles and deaden the senses" (Covington & Surrey, p. 342). Alcohol abuse in either partner tends to only make marital problems worse (Noel, 1991).

Given how entrenched substance abuse becomes in the context of the couple relationship, it is important to recognize the importance of relationship on substance abuse treatment. Research has clearly shown that involving family members in the treatment of women with substance abuse problems is very helpful. Osterman stated "the aim of the therapy is to restore shattered family ties, improve relations, emotions, and the way of communication" (Osterman & Grubic, 2001, p. 475). Osterman and Grubic found that when the spouse of a person who abuses substances is involved in the treatment, the families are more likely to achieve the goals of therapy.

Another reason that attention to relationship issues is so important is that wives often report that their drinking was caused by marital difficulties (Beckman & Amaro, 1986). If marital problems play a role in creating or maintaining women's substance abuse problems they need to be addressed as part of the treatment. In fact, O'Farrell and Fals-Stewart (2001) found in their review of family studies that clients in treatment which involved the family had less alcohol use, were more likely to enter and complete treatment, had better couple or family functioning, and better individual adjustment of the client and their spouse and family members. Finally, research has shown that when family members are involved in treatment, the length of stay in treatment is longer (Boylin & Doucette, 1997). As was mentioned above, the longer someone stays in treatment, the better the outcome of the treatment will be (Brown, Melchoir, & Huba, 1999).

Dropout

Dropout from substance abuse treatment is a serious problem (Epstein, McCrady, Miller, & Steinberg, 1994). In a variety of studies, dropout rates before the fifth session have been reported between 27-62%, and grow to 74-83% before two to three months into treatment (Leigh, Osborne, and Cleland, 1984; Noel, McCrady, Stout, & Fisher-Nelson, 1987; Rees, Beech, & Hore, 1984; Silberfeld & Glaser, 1979; Smart & Gray, 1978; Stark & Campbell, 1988). The consequences of dropping out are serious (Stark, 1992). One obvious consequence is that clients who dropout of treatment fare worse than those who complete treatment. Walker, Donovan, Kivlahan, and O'Leary (1983) found at a 9 month follow-up that 70.2% of the clients who completed an aftercare program were still abstinent 9 months later, while only 23.4% of those who dropped out from that same program were still abstinent. Aron and Daily (1976), found that those who completed a detoxification program or methadone maintenance program were more likely to be drug and alcohol free, to have lower relapse rates, to have less unemployment rates, lower arrest rates, and were more likely to have stopped intravenous drug use compared to those who dropped out of treatment. Another important factor is that treatment centers spend a lot of money in setting up treatment programs, which becomes wasted when clients begin treatment and then dropout. Treatment and its set up are expensive, both economically and practically. Clients who drop out of treatment use treatment slots that other could use and they accrue treatment expenses that do not result in change. Most importantly, there is a strong association between clients dropping out of treatment and a negative outcome (Stark, 1992).

Clients who drop out in the early stages of treatment have the same results as those clients who receive no treatment (Stark, 1992). This becomes a huge problem in treatment, as early dropout from substance abuse treatment is high. Most researchers have found a 50% dropout rate in the first month of treatment alone (Stark, 1992). It is important to note however, that this is similar to the medical field. The consequences on the client are significant.

Length of time in treatment is an important determinant of outcome. In a review article, Stark (1992) concludes that clients have more gains if they stay in treatment for at least 90 days (Stark, 1992). Stark is not clear whether this holds true for both men and women. However, as noted above, most clients drop out long before 90 days or the completion of treatment.

In general psychotherapy, clients often receive a large part of their benefit in the early stages of treatment, so if they leave, they still have their gains. Substance abuse however, is different in that they do not have sustaining gains unless they complete months of treatment (Stark, 1992). This makes retention in substance abuse treatment all the more important to address.

Clients who dropout in the early stages of treatment have shown to be less compliant with treatment requirements, and were less educated (Epstein et al., 1994). In their study of male alcoholics and their partners, Epstein et al. found that clients who dropped out early in treatment were less committed to their relationships.

One of the main questions is "Which factors lead to treatment dropout". Research on dropout has found conflicting results, most likely due to the different definitions of dropout among researchers (Pekarik & Zimmer, 1982). Some researchers use numbers of

sessions to assess for dropout, while others use number of months completed in treatment. Other researchers consider any client who hasn't completed the entire program to be a dropout. This has made comparing the research on dropout difficult. However, there are some factors that do appear to be related to attrition.

Clients who do stay in treatment say that they need more help, consider their treatment visits as important, believe they will keep their future appointments, believe their therapist's advice is important, and believe treatment will be helpful if they comply with the requirements (Rees, 1985). Those clients who drop out tend to have divergent expectations of the treatment from their therapists. They also have more psychopathology, impulsivity, and alienation (Keegan & Lachar, 1979). They also use more drugs than those who complete treatment. Depression is also a factor in dropout, with those clients suffering from depression having a higher dropout rate (Linn, 1978).

As mentioned in an earlier section, women dropout of treatment more than men. In addition to the reasons listed above, issues such as money, childcare, and lack of social support all contribute to the problem of women dropping out of substance abuse treatment.

Dropout and Relationships

Given the central role of relationships in women's lives, it is important to look at how relationships affect treatment completion. There is little research in this area. Zweben, Pearlman, and Li (1983) used a sample of 96 clients admitted to individual therapy and 49 couples admitted to a marital systems study. They found in their study on attrition from conjoint treatment that when clients are seen with their partner at the

assessment session and during treatment, the client is less likely to dropout than those who receive treatment without their partners. In a study of male clients and their partners, Epstein et al. (1994) report that the characteristics that are most associated with completing treatment are initial marital satisfaction, the client initiating contact for treatment, and having the partner fully involved in treatment. In this same study, Epstein found that marital commitment was found to be more predictive of completion. His study found that those who dropped out early were less committed to their relationships than those who dropped out later.

In a different study of 15 women in an outpatient substance abuse program, Kelly, Blacksin, and Mason (2001) examined how women who completed treatment differed from those who dropped out. They found that women with more personal and social resources are more likely to complete treatment. They also found that more completers (58%) had a specific person who they identified as someone who provided emotional support for them than the non-completers (29%). This supportive person was someone who was clear in their desire to help the woman stop abusing substances. Supporting this finding, Gainey, Wells, Hawkins, & Catalano, 1993) found that social isolation, defined as not having family support or living alone, is associated with dropout.

Despite these findings, many substance abuse programs do not offer or mandate partner attendance in treatment. And there have been few studies that have examined relationship quality as it pertains to treatment completion (Kelly et al., 2001). The purpose of this study is to fill this gap in the research.

Conclusion

Women's substance abuse is rising, and treatment needs to accommodate the needs of women entering treatment. Part of accomplishing this will include helping women seek and access treatment, helping them with their care-taking responsibilities so they can focus on their treatment, and helping them with logistical issues such as transportation and finances.

Once women enter treatment, the program needs to focus on their particular needs. One major area needs to be arranging for mental health treatment, especially given the high rate of dual diagnosis among women. Finally however, treatment for women with substance abuse issues needs to include a relationship component, which includes her partner in the treatment. This will help increase the women's feeling of being supported in her efforts to get clean, while also addressing the role the relationship plays in her substance abuse. These changes need to be incorporated so that women in treatment can begin to have greater success rates.

Chapter 3: Methods

Introduction

The purpose of this study is to examine the perceptions women with substance abuse problems and their partners have of their relationships, and how these perceptions relate to dropout from drug treatment. The perceptions of the woman with substance abuse problems and her partner are analyzed individually and as a dyad.

Participants and Procedures

The participant pool for this study were 248 women who were part of a National Institute of Drug Abuse (NIDA) research project entitled "Couple-Focused Therapy for Substance Abusing Women". The project was conducted by a team of researchers at Purdue University, and was led by Robert A. Lewis.

The purpose of this larger study was to examine the usefulness of adding a couples therapy component to a traditional drug treatment program. The hypothesis was that relationships play an important part in the road to sobriety for women with substance abuse problems, and that adding couples therapy would improve outcome. The project was a five-year study conducted at two agencies in the southwestern United States. One agency works with an abstinence-based model, and is an intensive outpatient treatment center. The other agency is a methadone maintenance agency which is also an outpatient center. Both agencies use components of the twelve-step program, though neither is strictly a twelve-step program. Both agencies offer counseling and support groups as part of the treatment approach, and agreed to participate in the study because they were

"interested in addressing the relationship concerns of their women clients" (Nelson et al., 1996).

Admission criteria for the study were being a woman who was married or in a relationship of at least six months duration. The women with substance abuse problems had to be willing to participate in this study and to complete the pre-test in order to be admitted to the study. Her partner had to agree as well. Of the 248 women who were screened, 166 entered the study.

The subjects completed an intake to assess for eligibility. If they met eligibility criteria, the women were then put through detoxification if needed. Subjects then took a pre-test and were randomly assigned to one of three groups: Primary Alcohol Substance abuse treatment (PASA) or Methadone only, PASA or Methadone plus Systemic Individual Therapy, or PASA or Methadone plus Systemic Couples Therapy. Having these three groups allowed the researchers to compare the treatment as usual group, the Systemic Individual Therapy group, and the Systemic Couples Therapy group, to see what effect adding a relationship component to the therapy brings (Wetchler, McCollum, Nelson, Trepper, & Lewis, 1993).

At the end of the 12 weeks, a post-test was given. Three months later, a booster session was given, plus an assessment/post-test. Six months later another booster session was given, along with an assessment/post-test. At the twelve-month mark, only an assessment was given. In the present study, only the pre-test data were used.

Most of the women in the subject pool were heterosexual, with 11% homosexual or bi-sexual. The average age of the subjects was 32.6. Most of them, 81%, had not received previous drug treatment. This population consisted of a lower socio-economic

group, with the median income of these subjects being $8,000. 64% of the subjects were on parole at the time of the study. The ethnicity of the subjects were: 81% white, 9.7% Hispanic, 5% African American, and 4.5% Native American. The median years of school was twelve.

Instruments

Various measures were used in the pre-tests. The Kansas Marital Satisfaction Scale, the Dyadic Formation Inventory, and the McMaster Family Assessment Device, were three of the instruments used. These instruments are being described because they all relate to partner relationships and were used in the analyses in the current study.

The Kansas Marital Satisfaction Scale

The Kansas Marital Satisfaction Scale (Schumm, Paff-Bergen, Hatch, Obiorah, Copeland, Meens, & Bugaighis, 1986) is used to measure an individual's satisfaction with their marriage or relationship, their satisfaction in their relationship with their spouse or partner, and their satisfaction with their spouse or partner. The Kansas Marital Satisfaction Scale is a likert-type 7 point scale ranging from 1 (extremely dissatisfied) to 7 (extremely satisfied). The scores are summed, with lower scores indicating greater dissatisfaction and higher scores indicating greater satisfaction. The total score range is from 3 to 21. The KMSS is unique in that it consists only of three questions, therefore not requiring lengthy time commitment, yet it is able to detect differences in satisfaction in the marital relationship (Schumm et al., 1986). The KMSS has internal consistency reliability, test-retest reliability, construct validity, and criterion-related validity (Schumm

et al., 1985). Schumm also found the KMSS to meet requirements form concurrent validity, correlating with the Dyadic Adjustment Scale. The KMSS was highly correlated with the Dyadic Adjustment Scale ($r = .94$, ($p < .001$) (Schumm et al., 1986).

The Dyadic Formation Inventory

The Dyadic Formation Inventory (Lewis, 1973) is a self-report questionnaire consisting of 74 items. Most of the subscale scores are formed by summing. The instrument measures items such as dyadic exclusiveness, value consensus, dyadic commitment, identification as a pair, dyadic interaction, and dyadic preference. Dyadic exclusiveness refers to the exclusion of others into their pair relationship. Value consensus refers to the degree the pair have formed a pair system with appropriate boundaries around their relationship. Dyadic commitment refers to the pair's determination to have their relationship continue. Couple identification as a pair refers to the awareness of being a couple, of viewing themselves as "us". Dyadic interaction refers to how the pair interacts together as opposed to operating separately. Dyadic preference refers to the extent they prefer each other to other family members and friends.

Validity was tested in a Southeastern university study consisting of 268 students to see if the DFI could account for the continuation of the couples' relationship over time. Couples' pre-tests scores were compared between groups who broke up and those who continue their relationship. Six of the seven items were statistically significant, and those who continued their relationship had higher pre-test scores than those who discontinued their relationship. The significance level was from $p < .001$ – $p < .06$.

Reliability was tested in a study of 91 couples at the University of Minnesota for a time period for two years. The pattern found was that the couples who showed more similarity in values, interests, and personality at test time one also reported this similarity at test time two.

The Family Assessment Device

The Family Assessment Device (FAD) (Epstein, Baldwin, & Bishop, 1983) was designed as an instrument to evaluate family functioning. It describes transactional patterns between family members as well as structural and organizational properties of the family (Epstein et al., 1983). It provides therapists and researchers with information of family functioning on numerous dimensions (Cromwell, Olson, & Fournier, 1976). It is also used to distinguish between healthy and unhealthy families, while measuring the family members perceptions of their families. The Family Assessment Device is a measure of 53 questions, and is used to evaluate family functioning.

The FAD is one of the most widely used family assessment tools. The seven subscales include problem solving, communication, roles, affective responsiveness, affective involvement, behavior control, and general functioning. The problem solving scale assesses the ability of the family to resolve issues that threaten the functioning of the family. The communication subscale focuses on whether verbal messages are clearly understood by the person it was directed to. The roles subscale focuses on items such as how resources, nurturence, and support are provided, as well as whether tasks are fairly distributed among family members. The affective responsiveness subscale focuses on how family members can experience appropriate affect in various situations. Affective involvement focuses on the values family members place on each other's activities. The

behavior control subscale focuses on how the family sets and maintains its standards for each others behaviors. The general functioning scale measures the overall health of the family.

The FAD is a 53-item self-report questionnaire designed to be filled out by the family members. Family members rate their agreement to the items, giving a rating of strongly disagree, disagree, agree, or strongly agree. The scores range from 1 to 4, with 1 representing healthy functioning and 4 representing unhealthy functioning. Some of the questions included are "after our family tries to solve a problem, we usually discuss whether it worked or not", "tenderness takes second place to other things in our family", and "we get involved with each other only when something interests us". The questionnaire takes about 15-20 minutes to complete (Epstein et al., 1983).

Despite Epstein et al.'s finding that the FAD consists of discrete subscales, Ridenour and colleagues found that the subscales tend to overlap significantly, and that the general functioning subscale can be used as the representative subscale (Ridenour, Daley, & Reich, 1999). Therefore in this study, only the score on the general functioning subscale was examined and analyzed.

Validity was found by comparing the individuals scores of clinically presenting families with individuals of non-clinical families. In each case the non-clinical group had significantly lower group means than the clinically presenting families ($p<.001$). Lower scores represent healthier functioning on the FAD.

Reliability was found by checking the internal consistency of the subscale which ranged from .72 - .92 using Chronbach's alpha.

Analyses

Data were analyzed as follows:

Research Question One:

How do <u>women</u> who drop out of treatment differ in their perceptions of their relationship quality from women who complete treatment?

Pre-test scores on the KMSS, FAD, and the DFI were compared by t-tests between women who dropped out of treatment and those who completed.

Research Question Two:

How do <u>partners</u> of women who drop out of treatment differ in their perceptions of their relationship quality from partners of women who complete treatment?

Pre-test scores on the KMSS, FAD, and the DFI were compared by t-tests between the partners of women who dropped out of treatment and the partners of those who completed.

Research Question Three:

Is there a relationship between a female substance abuser and her partner's perception of their relationship quality and her dropout from drug treatment?

For the analyses, I converted the subscale scores on all three measures for each subject (female and her partner) to standardized scores, and then averaged them to obtain an overall relationship satisfaction score for each individual. Positive scores indicate "more satisfied" than the mean, and negative scores indicate "less satisfied" than the mean for each subject.

I then created four groups based on couple concordance in how they view their relationship. The four group categories were “both more satisfied”, “both less satisfied”, “partner more satisfied, female less satisfied”, and “female more satisfied, partner less satisfied” than the mean.

Finally, I ran a chi-square test to see if there was a statistically significant relationship between group membership and the woman dropping out of treatment.

Chapter Four: Results

The purpose of this study was to examine the perceived relationship qualities of women with substance abuse issues and their partners to see if there are characteristics that are associated with attrition from substance abuse treatment. The data were analyzed on an individual basis and on a dyad basis. The three research questions addressed by this study were: 1) How do women who drop out of treatment differ in their perceptions of their relationship quality from women who complete treatment? 2) How do partners of women who drop out of treatment differ in their perceptions of their relationship quality from partners of women who complete treatment? 3) Is there a relationship between a female substance abuser and her partner's perception of their relationship quality and her dropout from drug treatment?

Participants

My analyses were conducted using a group of 166 couples in which the woman and her partner completed at least an intake, a pre-test, and may have also completed a therapy session. At pre-test, the average age of the women was 33 years, with a range between 18 and 72 years. They reported having 0 to 10 children, with a mode of 2. The incomes for this group were low, with the average income only $12,191. A few high incomes skewed these results, as the median was actually $8,000 per year. The average years of formal education was 12, with a range from 1 to 20 years. Ethnically, the group was 80.7 percent White, 9 percent Hispanic, 4.2 percent African American, 5.4 percent Native American, and .6 percent Asian/Pacific Islander. For marital status, 43.7 percent reported they were married, 24.6 percent reported they were divorced, 26.3 percent

reported they were never married, 3.0 percent reported they were separated, and 2.4 percent reported they were widowed. All participants had to be presently in a committed relationship in order to be eligible for this study.

The most common drug of choice reported was "other opiates" (29.3%), with alcohol second (21.0%), cocaine third (19.8%), heroin fourth (15.0%), and tranquilizers fifth (4.8%). The remaining drugs, barbituates, amphetamines, and marijuana represented much smaller percentages, totaling the final 10 percent.

There were no demographics collected for the male partners in this study.

Research Question One

How do women who drop out of treatment differ in their perceptions of their relationship quality from women who complete treatment?

Scores on the six subscales of the Dyadic Formation Inventory, the Kansas Marital Satisfaction Scale and the General Functioning Scale of the Family Assessment Device were analyzed to address this research question. Each of these scales measures respondent's perceptions of aspects of their relationship. The group of women who dropped out of treatment did not differ significantly on any of the scales from those who completed treatment. (See Table 1)

Table 1

Mean differences in women's scores on the DFI and the KMSS

	N	Mean	T	df	sig.	sd
Dyadic exclusiveness						
dropout	68	40.1471	-0.435	153	0.664	6.92015
complete	87	40.5977				5.95616
Value consensus						
dropout	74	40.0565	0.074	165	0.941	10.4031
completed	93	39.9351				10.6054
Couple total happiness						
dropout	71	4.7324	0.28	157	0.78	1.60319
completed	88	4.6591				1.67391
Dyadic commitment						
dropout	74	22.8514	0.68	165	0.498	2.89748
completed	93	22.4964				3.67292
Identification as a pair						
dropout	74	21.2162	-0.24	164	0.81	4.91648
completed	92	21.4022				4.98803
Individual personal happiness						
dropout	72	4.0417	1.209	161	0.228	1.33678
completed	91	3.7802				1.39684
Dyadic interaction						
dropout	74	42.3405	1.654	165	0.1	7.71803
completed	93	40.2551				8.38139
Dyadic preference						
dropout	74	5.3425	-0.142	164	0.888	1.40652
completed	93	5.3763				1.62128
KMSS						
dropout	74	14.3378	-0.009	165	0.993	4.68538
completed	93	14.3441				4.5695

Research Question Two

How do partners of women who drop out of treatment differ in their perceptions of their relationship quality from partners of women who complete treatment?

The Dyadic Formation Inventory, the Kansas Marital Satisfaction Scale, and the General Functioning Subscale of the Family Assessment Device were used to gather data

relevant to this question. The partners of women who dropped out of substance abuse treatment reported higher scores on the dyadic commitment subscale on the Dyadic Formation Inventory. Dyadic commitment is defined as the degree to which the couple is determined to continue their relationship. Examples of items on the Dyadic Commitment Subscale are:

That other person and I have…

_____ 1. no commitment to each other
_____ 2. an informal understanding to be married someday
_____ 3. a formal understanding to be married someday
_____ 4. a day already picked for our wedding
_____ 5. been married

How often do you contemplate (or fantasize) breaking off your relationship with the other person? (Reverse coded)

_____ 1. never
_____ 2. very rarely
_____ 3. seldom
_____ 4. sometimes
_____ 5. frequently
_____ 6. often,
_____ 7. very often

The partners of women who dropped out also reported higher scores on the dyadic interaction subscale of the Dyadic Formation Inventory than the partners of the women who completed treatment. Dyadic interaction is defined as the extent to which the couple functions together rather than autonomously. Examples of dyadic interaction are:

To what extent have you both done the following things together?					
	Always without your partner	Almost always without your partner	Sometimes with/without your partner	Almost always with your partner	Always with your partner
Go to a movie	1	2	3	4	5
Visit friends	1	2	3	4	5
Watch TV	1	2	3	4	5

Table 2
Mean differences in partners' scores on the DFI and the KMSS

	N	Mean	T	df	sig.
Dyadic exclusiveness					
dropout	65	39.65	-0.222	141.431	0.825
complete	84	39.87			
Value consensus					
dropout	74	41.89	1.682	156.535	0.095
completed	93	39.59			
Couple total happiness					
dropout	72	5.1	1.449	152.03	0.15
completed	92	4.78			
Dyadic commitment					
dropout	73	23.86	2.521	163.958	0.013*
completed	93	22.68			
Identification as a pair					
dropout	74	22.56	0.881	158.228	0.38
completed	93	21.9			
Individual personal happiness					
dropout	72	4.67	0.869	146.481	0.386
completed	93	4.51			
Dyadic interaction					
dropout	73	44.45	2.099	160.928	0.037*
completed	92	41.94			
Dyadic preference					
dropout	74	6.84	-0.199	152.117	0.842
completed	93	6.88			
KMSS					
dropout	73	15.48	1.053	152.321	0.294
completed	92	14.85			

* $p < .05$

On the Family Assessment Device, the partners of women who dropped out reported lower scores on the general functioning subscale. Lower scores represent better functioning on this subscale. General functioning assesses the overall functioning in the

family in areas such as communication, affection, and structure of the family. Examples of items on the General Functioning Subscale are:

	Strongly agree	Agree	Disagree	Strongly disagree
In times of crisis we can turn to each other for support	1	2	3	4
We cannot talk to each other about the sadness we feel (Reverse coded)	1	2	3	4
Individuals are accepted for what they are	1	2	3	4

As mentioned earlier, the subscale of general functioning has been found to be representative of all the subscales on the FAD.

Table 3
Mean differences in partners' scores on the FAD General Functioning Subscale

	N	Mean	T	df	sig.
General functioning					
dropout	74	2.04	-2.048	165	0.042*
completed	93	2.18			

p<.05

Research Question Three

Is there a relationship between a female substance abuser and her partner's perception of their relationship quality and her dropout from drug treatment?

As described in Chapter 3, scores on all scales were standardized and averaged to form an overall relationship quality score for each woman and her partner. Based on these scores, women and partners were divided into those who perceived higher relationship quality (at or above the median on the combined score) and those who perceived lower relationship quality (those below the median). Finally, four groups were

formed based on the concordance between client and partner scores – both higher; both lower; woman higher, partner lower; and partner higher, woman lower. A cross-tabulation table was used to examine the relationship between a woman's membership in one of these groups and her completion of treatment. No significant relationship was found. (See Table 4)

Table 4
Cross-tabulation: Couple perceived quality concordance and women's treatment completion

	Dropout	Completed
Both high	24 (48.0%)	26 (52.0%)
Female high, partner low	8 (32.0%)	17 (68.0%)
Partner high, female low	12 (57.1%)	9 (42.9%)
Both low	56 (42.4%)	76 (57.6%)

$\chi^2 = 4.83$, df = 3, p = .185

Additional Analyses

Although no relationship was found between the four concordance groups and treatment completion, inspection of the cross-tabulation table suggested that the partner's perception of relationship quality might be related. To test this idea, two additional analyses were conducted.

The first analysis examined the relationship between women's overall perception of their relationship quality and treatment completion. No significant relationship was found. (See table 5)

Table 5
Cross-tabulation: Women's perceived relationship quality and treatment completion

	dropout	completed
Female reporting "lower quality" relationship	31 (43.1%)	41 (56.9%)
Female reporting "higher quality relationship"	37 (45.1)	45 (54.9%)

$\chi^2 = .07$, df = 1, p = .797

The second analysis examined partners' overall perception of relationship quality and women's treatment completion. A significant relationship between these two variables was found (See table 6). More women whose partners fell into the lower perceived relationship quality group completed treatment than did those whose partners were in the higher perceived relationship quality group.

Table 6
Cross-tabulation: Partners' perceived relationship quality and treatment completion

	dropout	completed
Partner reporting "lower quality" relationship	21 (32.3%)	44 (67.7%)
Partner reporting "higher quality relationship"	41 (51.9%)	38 (48.1%)

$\chi^2 = 5.58$, df = 1, p = .018

Chapter Five: Discussion

The purpose of this study was to examine the perceived relationship qualities of women in substance abuse treatment and their partners' perceptions to see if there are characteristics that are associated with treatment dropout. The study analyzed data from 166 couples where the female had a problem with substance abuse, and was in a committed relationship with a male partner. The perceptions of their relationship quality of the women who dropped out were compared to women who completed treatment. The data from their partners were also compared. And finally, the data was analyzed to see if there was an interaction between the women's scores and their partners' scores which affected treatment completion rates.

Discussion of Results for Research Question One

How do women who drop out of treatment differ in their perceptions of their relationship quality from women who complete treatment?

There were no significant differences of perceived relationship quality between women who dropped out and women who completed treatment. This is interesting given the importance women place on relationship in their lives. It would have been expected that women who felt their relationship was of higher quality would do better in treatment because she would feel supported by her partner, and would have a more positive outlook on treatment because of this support. On the other hand, its also possible that women who felt their relationship was in jeopardy would do better in treatment because of the importance of relationships in their lives. They may be more willing to stay in treatment if they think it may positively benefit their relationship. The data however, do not support

this view, as there were no significant differences in perceptions found between women who completed and those who dropped out.

Discussion of Results for Research Question Two

How do partners of women who drop out of treatment differ in their perceptions of their relationship quality from partners of women who complete treatment?

There was a pattern found in the data of the partners' that their perceptions did in fact differ between the partners of women who completed and those who dropped out.

On the Dyadic Formation Inventory, the partners of the women who dropped out reported higher scores on the Dyadic Commitment Subscale than the partners of those who completed. Dyadic Commitment measures the extent to which the couple is determined to continue the relationship. When one looks at the importance of relationships to women, the relationship can be a motivating factor. Its possible that if the partner is highly committed, the female may feel more comfortable dropping out of treatment because the continuation of her relationship doesn't depend on whether she stops using or not. This high level of commitment may actually be an un-motivating factor for women completing treatment.

Another subscale on the Dyadic Formation Inventory which proved significant was the Dyadic Interaction Subscale. The partners' of women who dropped out of treatment also reported higher dyadic interaction. Dyadic Interaction is the extent to which the couple functions together rather than independently. This could be explained by the fact that possibly the women whose partners reported higher Dyadic Interaction are used to doing so much with their partners that being in treatment away from them is

too much distance. Her partner may not be able to adjust to this change as well, and may encourage her to dropout of treatment. The treatment in this study however, was intensive outpatient, with the treatment occurring during the day for 4 hours, but returning home at night, so this may not be applicable.

On the Family Assessment Device, the partners of women who dropped out reported better overall functioning on the General Functioning Subscale than the partners of women who completed treatment. General Functioning is the overall structural, affective, and communication level of the family. Once again, it may be that women whose partners feel the relationship is strong may feel comfortable dropping out of treatment because their relationship is not in jeopardy.

One fact to consider however, is that all of these mean differences are within a few points of each other, some only tenths of a point. While these differences were statistically significant, it is important to look at how this is clinically relevant. Clinically, it would be difficult to differentiate those partners who have slightly more positive perceptions of their relationships from those who have slightly less positive perceptions of their relationship. On account of this, it is important not to make too broad of assumptions about the role of the partners' perceptions on the completion rates of women in substance abuse treatment.

Discussion of Results for Research Question Three

Is there a relationship between a female substance abuser and her partner's perception of their relationship quality and her dropout from drug treatment?

The perceptions of women and their partners were compared to see if there was an interaction which may be associated with dropout. There were no significant differences found. It would seem to make sense that if both partners were less satisfied with their relationship, the women would be more motivated to complete treatment, which she was (24 completed to 12 dropout). When the partner reported higher relationship quality and the female lower, the female was less likely to complete, but still not significantly (9 completed to 12 dropout). When the partner reported lower relationship quality and the female higher, she was more likely to complete treatment (17 completed to 8 dropout). And finally, when both reported high relationship quality, roughly equal numbers of women completed and dropped out (26 completed to 24 dropout).

Discussion of Results for Additional Analyses

On account of the trend found on the importance of the partners' perceptions, two additional analyses were run. Women who scored below the median on overall relationship quality were compared to women who reported higher relationship quality. Once again, no relationship was found. This could be that women's perception of their relationship doesn't have an effect on their completing treatment because other factors such as finances or childcare are more important.

The second analysis compared the partners who reported lower relationship quality to those who reported higher relationship quality. Once again, the women whose partners' reported lower quality were much more likely to complete treatment. This supports the earlier pattern found, emphasizing the importance of the partners' perceptions.

Where Does this Study Fit in the Literature?

Research has shown the importance relationships play in the lives of women (Gilligan, 1982; Lerner, 1989). As noted earlier, women are often introduced to drugs by their partner, and their drug use is often maintained by their partner (Anglin, Kao, Harlow, & Peters, 1987). It has also been suggested that women are more likely than men to state their reason for drinking is due to marital instability and family problems (Williams & Klerman, 1986). Clearly, the partner relationship plays a role in womens' substance abuse problems.

Substance abuse treatment has not acknowledged or incorporated this into treatment. Current substance abuse treatment is based on treatment designed for the male substance abuser, and does not acknowledge many factors which are important to women, such as relationships, child care, and other mental health problems.

This study examined the role of perceived relationship quality on treatment completion. This study found that the perceptions of the partner may have a significant impact on the completion rates of women in substance abuse treatment.

Clinical Implications

A clinical implication of this study is how important including the partner in the treatment can be. The partners' perceptions of the relationship are the only significant finding in this study. If treatment can include the partner, and help him to recognize how important completing treatment is for successful outcome, women may begin to have higher treatment completion rates, therefore leading to more positive outcomes.

Another implication is that the partners may be currently using substances themselves, and this may affect their involvement and support of their wives' treatment. If the male is in treatment himself, he is more likely focusing on his own treatment, as is encouraged in the early stages of substance abuse treatment (Laudet, Magura, Furst, & Kumar, 1999).

Another implication is that of the male partners' views of their female partners' drug use. Laudet et al. found that male partners' of substance abusing women are often centered around traditional sex roles. If the woman is maintaining what the male considers to be her responsibility in the home in terms of household chores and childcare, the male partners often find their female partners' drug use more acceptable. Therefore it may be important for the clinician to consider how the male partner views his female partner's drug use. He may need to be educated about substance abuse and the problems associated with it, regardless of whether it is currently causing problems within the home. As mentioned earlier, women with more personal and social resources are more likely to complete treatment. The male partner's support could be a significant resource for the female in treatment, thereby increasing her odds of a more successful outcome.

Future Research

Other factors which may affect women's treatment completion rate need to be studied. While their perceptions of their relationship were not found to significantly affect their treatment completion, there may be other factors that are. Examining the importance of women's relationship with their children is one possibility. Another could

be examining their relationships within their family of origin. A regression analysis of some of these factors may turn up information not found in this study.

Another area, briefly referred to above, that may be beneficial to examine is the role of the partner's behavior in the female's substance abuse. If the partner is still using, this will mostly likely create yet another barrier for women trying to get sober. Conversely, if he is also in treatment for his own drug use, he may be focused on his own recovery and not able to be the support system the female needs. The role of the partner needs to be examined.

Limitations

This population was fairly limited to lower income participants with less education, and can not be generalized to the general substance abuse population.

Also, there may have been alternative reasons explaining some of the dropout in women. This study looked only at the pre-tests and at the final completion rate. Its possible that interviews at the end of the study would have given more information concerning the relationship and how it was affected by the treatment. Post-test data however is hard to get from clients who drop out of treatment because they often are unwilling or unable to come in to complete these tests. However, post-tests and qualitative interviews may have provided much more information

Conclusion

This study looked at women with substance abuse issues and their partners perceptions of their relationship quality to see if they affected attrition from drug

treatment. Analysis of data addressed the womens' perceptions, their partners' perceptions, and looked to see if there was concordance between these.

Only the partner's perceptions seemed to affect attrition. When the partner reported lower relationship quality, the woman was more likely to complete treatment. The woman's perceptions did not seem to affect completion rates. Further research on what does affect completion rates is severely needed.

References

Ammerman, R.T., Kolko, D.J., Kirisci, L., Blackson, T.C., Dawes, M.A., (1999). Child abuse potential in parents with histories of substance use disorder. Child Abuse & Neglect, 23 (12), 1225-1238.

Anglin, M.D., Kao, C., Harlow, L.L., & Peters, K., (1987). Similarity of behavior within addict couples: I. Methodology and narcotics patterns. International Journal of the Addictions, 22, 497-524.

Annis, H., and Liban, C. (1980). Alcoholism in women: Treatment modalities and outcome. In H. Kalant (Ed.), Research advances in alcohol and drug problems. Vol. 5: Alcohol and drug problems in women. New York: Plenum.

Arfken, C., Klein, C., di Menza, S., Schuster, C.R. (2001). Gender differences in problem severity at assessment and treatment retention. Journal of Substance Abuse Treatment, 20, 53-57.

Argyle, M., Lalljee, M., & Cook, M., (1968). The effects of visibility on interaction in a dyad. Human Relations, 21, 3-17.

Aron, W.S., & Daily, D.W., (1976). Graduates and splitees from therapeutic community drug treatment programs: A comparison. The International Journal of the Addictions, 11, 1-18.

Bays, J. (1990) Substance abuse and child abuse, impact of addiction on the child. Pediatric Clinics of North America, 37, (4), 881-904.

Beckman, L.J. & Bardsley, P.E. (1986). Individual characteristics, gender differences, and dropout from alcoholism treatment. Alcohol & Alcoholism, 21, 213-224.

Beckman, L.J., & Amaro, J. (1986). Personal and social difficulties faced by women and men entering alcoholism treatment. Journal of Studies on Alcohol, 47, 135-145.

Boylin, W.M., Doucette, J., and Jean, M.F. (1997). Multifamily Therapy in substance abuse treatment with women. The American Journal of Family Therapy, 25, (1). 39-47.

Brown, V.B., Huba, G.J., Melchoir, L.A. (1995). Level of burden: women with more than one co-occurring disorder. Journal of Psychoactive Drugs, 27 (4). 339-346.

Brown, V.B., Huba, G.J., Melchoir, L.A. (1995). Level of burden: women with more than one co-occurring disorder. Journal of Psychoactive Drugs, 27 (4). 339-346.

Brown, V.B., Melchoir, L.A., Huba, G.J. (1999). Level of burden among women diagnosed with severe mental illness and substance abuse. Journal of Psychoactive Drugs, 31 (1). 31-40.

Brown, V.B., Melchior, L.A., Panter, A.T., Slaughter, R., and Huba, G.H. (2000). Women's steps of change and entry into drug abuse treatment, A multidimensional stages of change model. Journal of Substance Abuse Treatment, 18, 231-240.

Chasnoff, I.J., Griffith, D.R., Freier, C., & Murray, J. (1992). Cocaine/polydrug use in pregnancy: Two year follow up. Pediatrics, 89, 284-289.

Chavkin, W. (1990). Drug addiction and pregnancy: policy crossroads. Public Health and the Law. AJPH, 80 (4). 483-487.

Condelli, W.S., Kock, M.A., and Fletcher, B. (2000). Treatment Refusal/Attrition among adults randomly assigned to programs at a drug treatment campus. Journal of Substance Abuse Treatment, 18, 395-407.

Corbett, K., Mora, J., and Ames, G. (1991). Drinking Patterns and Drinking Relationship problems of Mexican American husbands and wives. Journal of Studies on Alcohol, 52 (3). 215-223.

Covington, S.S., and Surrey, J.L. The relational model of women's psychological development: implications for substance abuse. (In: Gender and Alcohol, Individual and social perspectives. Eds. Wilsnack and Wilsnack) 1997.

Cromwell, R., Olson, D., & Fournier, D., (1976). Diagnosis and evaluation in marital and family counseling. In D.J. L. Olson (Ed.), Treating relationships. Lake Mills, IA: Graphic, 1976).

Cyr, M.G., and Moulton, A.W. (1993). The Physician's Role in prevention, detection, and treatment of alcohol abuse in women. Psychiatric Annals, 23 (8). 454-462.

Davis, S., (1994). Drug-treatment decisions of chemically dependent women. International Journal of the Addictions, 29, 1287-1304.

Egelko, S., Galanter, M., Dermatis, H., & DeMaio, C. (1997). Evaluation of a Multisystems Model for Treating Perinatal Cocaine Addiction. Journal of Substance Abuse Treatment, 15 (3). 251-259.

Epstein, N.B., Baldwin, L.M., & Bishop, D.S., (1983). The McMaster Family Assessment Device. Journal of Marital and Family Therapy, 9(2), 171-190.

Epstein, McCrady, Miller, Steinberg (1994). Attrition from conjoint alcoholism treatment: do dropouts differ from completers? Journal of Substance Abuse, 6, 249-265

Fals-Stewart, W., Virchler, G.R., Ellis, L (1999). Procedures for Evaluating the Dyadic Adjustment of Drug-Abusing Patients and their Intimate Partners. Journal of Substance Abuse Treatment, 16 (1). 5-16.

Finnegan, L.P. Drug Addiction Research and the Health of Women- In: Drug Addiction Research and the Health of Women. 1998. (Eds. Wetherington, C.L. & Roman, A.B.)

Fiocchi, F.F., and Kingree, J.B. (2001). Treatment retention and birth outcomes of crack users enrolled in a substance abuse treatment program for pregnant women. Journal of Substance Abuse Treatment, 20, 137-142.

Fleming, J., Mullen, P., & Bammer, G., (1997). A study of potential risk factors for sexual abuse in childhood. Child Abuse & Neglect, 21(1), 49-58.

Forsyth, B.W.C., Leventhal, J.M., Qi, K., Johnson, L., Schroeder. L., & Votto, N. (1998). Health care and hospitalization of young children born to cocaine-using women. Archives of Pediatric Adolescent Medicine, 152, 177-184.

Gainey, R., Wells, E., Hawkins, J., & Catalano, R., (1993). Predicting treatment retention among cocaine users. International Journal of the Addictions, 28, 487-505.

Gavaler, J.S., (1993). Alcoholic beverage consumption and normal postmenopausal women. In E.S.L. Gomberg & T.D. Nirenberg (Eds.) Women and Substance Abuse, p. 18-41, Norwood, NJ: Ablex.

Gilligan, Carol. (1982). In a Different Voice: Psychological theory and women's development. Cambridge, MA: Harvard University Press.

Gomberg, E.S., (1976). The female alcoholic. In R.E. Tarter & A.A. Sugarman (Eds.). Alcoholism: Interdisciplinary approaches to an enduring problem. p. 603-636. Reading MA: Addison Wesley.

Grant, B.F., Harford, T.C., Chou, P., Pickering, R., Dawson, D.A., Stinson, F.S. & Noble, J., (1991). Prevalence of DSM-III-R Alcohol Abuse and Dependence: United States, 1988. Alcohol Health and Research World, 15, 91-96.

Gross, W.C. & Billingham, R.E. (1998). Alcohol consumption and sexual victimization among college women. Psychological Reports 82 (1), 80-82.

Grover, K.J., Paff-Bergen, L.A., Russell, C.S., & Schumm, W.R., (1984). "The Kansas Marital Satisfaction Scale: A further brief analysis." Psychological Reports, 54, 629-630.

Hall, P.M. (1995). Factors influencing individual susceptibility to alcoholic liver disease. In: Hall, P.M., ed., Alcoholic Liver Disease: Pathology and Pathogenesis. 2nd ed. London, UK: Edward Arnold, 1995. Pp. 299-316.

Hammer, T., and Vaglum, P. (1989). The increase in alcohol consumption among women: a phenomenon related to accessibility or stress? A general population study. British Journal of Addiction, 84, 767-775

Handler, A., Kistin, N., David, F., & Ferre, C. (1991). Cocaine use during pregnancy: Perinatal outcomes. American Journal of Epidemiology, 133, 818-825.

Hill, S.Y. Biological consequences of alcoholism and alcohol-related problems among women. In: Special Populations Issues. National Institute on Alcohol Abuse and Alcoholism. Alcohol and Health Monograph No. 4. DHHS Pub. No. (ADM) 82-1193. Washington, DC: Supt. of Docs., U.S. Govt. Print. Off., 1982. Pp. 43-73. (1982)

Hilton, M.E. 1991. The demographic distribution of drinking patterns in 1984. In: Alcohol in America: Drinking Practices and Problems, edited by W.B. Clark and M.E. Hilton. Albany, New York, State University of New York Press. p73-860.

Homila, M. Wives, Husbands and Alcohol: A study of informal drinking control within the family. (1988). Helsinki, Finnish Foundation for Alcohol Studies.

Hser, Y., Anglin, M.D., & McGlothin, W.H. (1987). Sex differences in addict careers. Initiation of use. American Journal of Drug and Alcohol Abuse, 13, 33-57.

Kandall, S.R. (1998). Women and addiction in the United States, 1920 to the present. In: C.L. Wetherington, & A.B. Roman (Eds.), Drug addiction research and the health of women (p. 98-4290). Rockville, MD: National Institute on Drug Abuse.

Kandel, D.B., Warner, L.A., & Kessler, R.C., (1998). The Epidemiology of substance use and dependence among women. In: Drug Addiction Research and the Health of Women. National Institutes of Health: Rockville, MD. p.105-130.

Kane-Cavaiola, C., & Rullo-Cooney, D., (1991). Addicted women: Their families effect on treatment outcome. Journal of Chemical Dependency Treatment, 4(1), 111-119.

Kantor, G.K. & Straus, M. (1989). Substance abuse as a precipitant of wife abuse victimization. American Journal of Drug and Alcohol Abuse, 15, 173-189.

Keegan, J.F., & Lachar, D. (1979). The MMPI as a predictor of early termination from polydrug abuse treatment. Journal of Personality Assessment, 43, 379-384.

Kelly, P.J., Blacksin, B., & Mason, E., (2001). Factors affecting substance abuse treatment completion for women. Issues in Mental Health Nursing, 2, 287-304.

Kessler, R.C., Nelson, C.B., McGonagle, K.A., Edlund, M.J., Frank, R.G., & Leaf, P.J. (1996). The Epidemiology of Co-occurring addictive and mental disorders: Implication for prevention and service utilization. American Journal of Orthopsychiatry, 66 (1). 17-31.

Kumpfer, K. (1991). Treatment programs for drug-abusing women. Future Child, 1, 50-71.

Laudet, A., Magura, S., Furst, R.T., & Kumar, N. (1999). Male Partners of Substance-Abusing Women in Treatment: An Exploratory Study. American Journal of Drug and Alcohol Abuse, 25 (4), 607-627.

Laudet, A.B., Magura, S., Vogel, H.S., and Knight, E. (2000). Recovery challenges among dually diagnosed individuals. Journal of Substance Abuse Treatment, 18, 321-329.

Leadley, K., Clark, C.L., and Caetano, R. (2000). Couples' Drinking Patterns, Intimate Partner Violence, and Alcohol-Related Partnership Problems. Journal of Substance Abuse, 2 (3). 253-263.

Leigh, G., Ogborne, A.C., & Cleland, P. (1984). Factors associated with patient dropout from an outpatient alcoholism treatment service. Journal of Studies on Alcohol, 45, 359-362.

Leonard, K.E., & Senchak, M. (1993) Alcohol and premarital aggression among newlywed couples. Journal of Studies on Alcohol, 11, 96-108.

Lerner, Harriett. (1989). The Dance of Intimacy, A woman's guide to courageous acts of change in key relationships. New York: Harper & Row.

Lewis, R.A., The Dyadic formation inventory: an instrument for measuring heterosexual couple development. (1973). International Journal of Sociology of the Family, 3, 207-216.

Lieber, C.S., (1993). Women and Alcohol: Gender differences in metabolism and susceptibility. In E.S.L. Gomberg & T.D. Nirenberg (Eds.). Women and Substance Abuse p.1-17. Norwood, NJ: Ablex.

Linn, M.W., (1978). Attrition of older alcoholics from treatment. Addictive Diseases, 3, 437-447.

Lundy, A., and Gottheil, E., Serota, R.D., Weinstein, S.P., & Sterling, R.C., (1995). Gender differences and similarities in African-American crack cocaine abusers. Journal of Nervous and Mental Disease, 183, 260-266.

McCollum, E.E. & Trepper, T.S. (1995). "Little by Little, Pulling Me Through" – Women's Perceptions of Successful Drug Treatment: A Qualitative Inquiry. Journal of Family Psychotherapy, 6 (1), 63-82.

Melchior, L.A., Huba, G.J., Brown, V.B., and Slaughter, R. (1999). Evaluation of the effects of outreach to women with multiple vulnerabilities on entry into substance abuse treatment. Evaluation and Program Planning, 22, 269-277.

Miller, B.A., Maguin, E., & Downs, W.R., (1997). Alcohol, drugs, and violence in children's lives. In: Galanter, M. ed. Recent Developments in Alcoholism: Volume 13. Alcoholism and Violence. New York: Plenum Press. 357-385.

Miller, J.B., and Stiver, I.P. (1993). A relational approach to understanding women's lives and problems. Psychiatric Annals, 23 (8), 424-431.

Millstein, R.A., (1993). NIDA expands its research on addiction and women's health. NIDA Notes, 10(1).

Mitchell, S.E., Newell, G.K., & Schumm, W.R., (1983). "Test-retest reliability of the Kansas Marital Satisfaction Scale." Psychological Reports, 53, 545-546.

Modesto-Lowe, V., and Kranzler, H.R. (1999). Diagnosis and Treatment of Alcohol dependent Patients with comorbid psychiatric disorders. Alcohol Research and Health, 23 (2), 144-149.

Moras, K. (1998). Behavioral therapies for female drug users: an efficacy-focused review. In: C.L. Wetherington, & A.B. Roman (Eds.), Drug addiction research and the health of women (pp. 98-4290). Rockville, MD: National Institute on Drug Abuse.

Nelson, T.S., McCollum, E.E., Wetchler, J.L., Trepper, T.S., Lewis, R.A. (1996). Therapy with women substance abusers: A systemic couples approach. Journal of Feminist Family Therapy, 8 (1), 5-27.

Nelson-Zupko, Kauffman, and Doe, 1995. Gender Differences in drug addiction and treatment: implications for social work intervention with substance abusing women. Social Work, 40, (1) 45-54.

NIAA Alcohol Alert, No. 45. Alcohol and Coronary Heart Disease. Rockville, MD: the Institute, 1999.

Nichols, M.P., and Schwarz, R.C. (1995). Family therapy: Concepts and methods. (3rd ed.) Boston: Allyn and Bacon.

National Institute on Drug Abuse. (1996). National pregnancy and health survey: drug use among women delivering livebirths: 1992. NIH Publication No. 96-3819. Washington, DC: U.S. Department of Health and Human Services.

Noel, N.E., McCrady, B.S., Stout, R.L., Fisher-Nelson, H. (1991). Gender differences in marital functioning of male and female alcoholics, Family Dynamics of Addiction Quarterly, 4, 31-38

Noel, N.E., McCrady, B.S., stout, R.L., & Fisher-Nelson, H. (1987) Predictors of attrition from an outpatient alcoholism treatment program for couples. Journal of Studies on Alcohol, 48, 229-235.

O'Farrell, T.J. & Fals-Stewart, W. (2001). Family-Involved Alcoholism Treatment, An Update. Recent developments in Alcoholism, 15,: Services Research in the Era of Managed Care, edited by Galanter, Kluwer Academic/Plenum Publishers, New York, 2001.

Osterman, F, and Grubic, V.N. (2000). Family Functioning of recovered alcohol addicted patients, A comparative study. Journal of Substance Abuse Treatment, 19, 475-479.

Pekarik, G., & Zimmer, L., (1982). Relation of client variables to continuance in five types of alcohol treatment settings. Addictive Behaviors, 17, 105-115.

Price, R.A., and Vandenberg, S.G. (1980). Spouse Similarity in American and Swedish Couples. Behavior Genetics, 10 (1), 59-71.

Reed, B.G., (1987). Developing women-sensitive drug dependence treatment services: Why so difficult? Journal of Psychoactive Drugs, 19, 151-164. (?)

Reed, B.G. (1985). Drug misuse and dependency in women: The meaning and implications of being considered a special population or minority group. International Journal of the Addictions, 20, 13-62.

Rees, D.W., Beech, H.R., & Hore, B.D., (1984). Some factors associated with compliance in the treatment of alcoholism. Alcohol & Alcoholism, 19, 303-307.

Rees, D.W. (1985). Health beliefs and compliance with alcoholism treatment. Journal of Studies on Alcohol, 46, 517-524.

Regier, D.A., Farmer, M.E., Rae,D.J, Locke, B.Z., Keith, S.J., Judd, L.L., and Goodwin, F.K. (1990). Comorbidity of Mental Disorders with alcohol and other drug use: Results from the Epidemiologic Catchment Area (ECA) Study. JAMA, 264 (19), 2511-2518.

Ridenour, T.A., Daley, J.G., and Reich, W.R, (1999). Factor Analyses of the Family Assessment Device. Family Process, 38,(4), 497-510.

Roberts, L.J., & Leonard, K.E. (1997). Gender Differences and Similarities in the Alcohol and Marriage Relationship. In: Gender and alcohol: Individual and social perspectives. p. 289-311. Piscataway, NJ: Rutgers Center of Alcohol Studies.

SAMHSA (Substance Abuse and Mental Health Services Administration). (1994). National household survey on drug abuse: Population estimates, 1993. Rockville, MD: Author.

Schumm, W.R., Paff-Bergen, L.A., Hatch, R.C., Obiorah, F.C., Copeland, J.M., Meens, L,D., & Bugaighis, M.A., (1986). Concurrent and Discriminant Validity of the Kansas Marital Satisfaction Scale. Journal of Marriage and the Family, 48, 381-387.

Schmidt, L., & Weisman, C., (1993). Development in alcoholism treatment. In Galanter (Ed.), Recent developments in alcoholism treatment. Vol. 11: Ten years of progress (p. 369-396). New York: Plenum Press.

Silberfeld, M., & Glaser, F.B., (1979). Use of the life table method in determining attrition from treatment. Journal of Studies on Alcohol, 39, 1582-1590.

Smart, R.G., & Gray, G., (1978). Multiple predictors of dropout from alcoholism treatment. Archives of General Psychiatry, 35, 363-367.

Smith-Warner, S.A., Seigelman, D., Yaun, S.S. (1998). Alcohol and breast cancer in women: A pooled analysis of cohort studies. JAMA 279 (7), 535-540.

Stark M.J., & Campbell, B.K., (1988). Personality, drug use, and early attrition from substance abuse treatment. American Journal of Drug and Alcohol Abuse, 14, 457-485.

Stark, M.J. (1992). Dropping out of substance abuse treatment: A clinically oriented review. Clinical Psychology Review, 12, p. 93-116,

Trepper, T.S., McCollum, E.E., Dankoski, M.E., Davis, S.K., & LaFazia, M.A., (2000). Couples Therapy for Drug Abusing Women in an Inpatient Setting: A Pilot Setting. Contemporary Family Therapy, 22 (2), 201-221.

Tuyns, A.J., & Pequignot, G. (1984). Greater risk of ascitic cirrohosis in females in relation to alcohol consumption. International Journal of Epidemiology 13(1): 53-57.

Urbano-Marquez, A., Estruch, R., Fernandez-Sola, J., Nicolas, J.M. Pare, J.C., Robin, E. (1995). The greater Rrsk of alcoholic cardiomyopathy and myopathy in women compared with men. JAMA, 274 (2), 149-154.

Walker, R.D., Donovan, D.M., Kivlahan, D.R., & O'Leary, M.R., (1983). Length of stay, neuropsychological performance and aftercare: Influences on alcohol treatment outcome. Journal of Consulting and Clinical Psychology, 51, 900-911.

Wetchler, J.L., McCollum, E.E., Nelson, T.S., Trepper, T.S., & Lewis, R.A. (1993). Systemic couples therapy for alcohol-abusing women. In T.J. O'Farrell (Ed.), Marital and family therapy in alcoholism treatment (p.236-260). New York: Guilford.

White, J.M., Winn, K.I., and Young, W.Y. (1998). Predictors of Attrition from an Outpatient Chemical Dependency Program. Substance Abuse, 19 (2), 49-59.

Williams, M.T., & Robers, C.S., (1991). Predicting length of stay in long-term treatment for chemically dependent females. International Journal of Addictions, 26, 605-613.

Williams, C.N., & Klerman, L.V., (1984). Female alcohol abuse: Its effects on the family. In S.C. Wilsnack & L.J. Beckman (Eds.), Alcohol problems in women: Antecedents, consequences, and interventions. p. 280-312. New York: Guildford.

Wilsnack S., and Wilsnack, R. (1990a). Marital drinking and the quality of marital relationships: Patterns from a US longitudinal survey. Presented at the 35th International Institute on the Prevention and treatment of Alcoholism, International Council on Alcohol and Addictions, Berlin, June, 1990.

Wilsnack S., and Wilsnack, R. (1990b). Husbands and wives as drinking partners. Presented at the 16th Annual Alcohol Epidemiology Symposium of the Kettil Brunn Society for Social and Epidemiological Research on Alcohol, June 1990.

Wilsnack, S.C., Wilsnack, R.W., (1995). Drinking and Problem Drinking in US Women. Patterns and Recent Trends. In: Recent Developments in Alcoholism. (Eds. Galanter, M).

Wilsnack, R.W., Wilsnack, S.C., & Klassen, A.D., (1981). Women's drinking and drinking problems: Patterns from a 1981 National Survey. American Journal of Public Health, 74, 1231-1238.

Wilsnack, S. (1995). Alcohol use and alcohol problems in women. In: The Psychology of Women's Health. (eds. Stanton, A.L. & Gallant, S.J.) 381-443.

Winter, J., Fals-Stewart, W, O'Farrell, T.J., Birchler, G.R., Kelly, M.L. (2002). Behavioral couples therapy for female substance abusing patients: effects on substance use and relationship adjustment. Journal of Consulting and Clinical Psychology, 70 (2), 344-355.

Zankowski, G.L. (1987). Responsive programming: Meeting the needs of chemically dependent women. Alcoholism Treatment Quarterly, 4 (4). 53-65.

Zweban, A., Pearlman, S., & li, S. (1983). Reducing attrition from conjoint therapy with alcoholic couples. Drug and Alcohol Dependence, 11, 321-331.

VITA FOR SUSAN PINTO SFERRA

Ft. Belvoir Chaplain Family Life Center
Therapist Intern January 2002 – August 2002
Provided systems based therapy to military family members assigned to the National Capitol area. Clients presented with issues such as marital problems, parenting, divorce, separation, remarriage, blended families, domestic violence, substance abuse, infidelity and relocation. Used primarily a Solution Focused theoretical approach, with the addition of Structural, Emotion Focused, Strategic, and Bowenian models when beneficial to assessment, treatment planning, and case summaries. PREP interventions and Gottman research incorporated into treatment.

Center for Family Services
Therapist Intern August 2000- August 2002
Provided therapy to clients at the Center for Family Services, working within a family systems perspective. Clients included individuals, couples, and families. Therapy focused on issues such as adjustment to separation and divorce, family of origin issues, parenting, anger management, prior trauma, behavioral problems in teens, and boundaries. Co-facilitated 18 week couples anger management program at Virginia Tech in the fall of 2000 and summer of 2002.

Center for Family Services
Clinic Staff August 1999- August 2002
Coordinated intakes for the Center for Family services. This included explaining the center to potential clients as well as obtaining necessary information concerning the issues bringing them into the center. Coordinated all therapist paperwork, including entering client information into client database, ensuring payment forms were accurate and progress notes were current, and filing terminated client folders. Also entered all financial transactions into QuickBooks database to track client payments. Tracked therapist intern's client hours needed for AAMFT licensure on a monthly basis. Coordinated public relations mailing three times a year to attract clients to the center.

Fairfax County Juvenile and Domestic Relations, Family Systems Counseling Unit
Therapist Intern September 2001- May 2002
Provided family therapy to court-involved families experiencing difficulties related to child behavior, substance abuse, truancy, parenting, custody, domestic assault, and other marriage and family issues. Therapeutic approach of Bowen Family Systems Theory emphasized. Provided family assessments for the court's Interdisciplinary and Diagnostic Team to offer treatment recommendations. Maintained written and verbal contact with judicial, court services and community based agencies.

The Stanley Foundation/National Institute of Mental Health
Administrative Liaison February 1998 – August 1999
Coordinated program activities across several centers and worked with multiple projects simultaneously. Provided general support to the Stanley Foundation Bipolar Network, as well as the Biological Psychiatry Branch at the NIMH. Responsibilities included supporting protocol research, light accounting for the network such as establishing vendor accounts for laboratories, and maintaining these accounts. Established and maintained article library and corresponding database.

Management Consulting and Research, Inc, Ballistic Missile Defense Organization Department
Lead Administrative Assistant June 1996- February 1998
Responsible for the hiring and supervision of a receptionist and an administrative assistant to support a 45-person effort. On-site point of contact for all new employees supporting corporate Human Resources, Facilities, and Security departments. Worked closely with Facilities Security Office to ensure employees and visitors had proper security clearance and visit requests. Prior to joining this department, supported the 25-person Naval Air Systems Command department. This included composing, proofreading, and editing correspondence, publishing technical reports, working notes, cost proposals, and various other documents and briefings.

Education
University of Virginia: Bachelor of Arts, Psychology, 1993

Certifications
Critical Incident Stress Management (CISM): Basic Group Crisis Intervention
Critical Incident Stress Management (CISM): Advanced Group Crisis Intervention