Evaluating, Treating and Monitoring the Female DUI Offender

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The number of females arrested and re-arrested for driving under the influence of alcohol or other drugs has increased in the past two decades. Increased female representation within those arrested for driving under the influence (DUI) of alcohol or other drugs suggests the need for more nuanced approaches to their evaluation, treatment, sentencing, and supervision. The purpose of this article is to briefly review what is known about: 1) the prevalence of female drinking and driving, 2) the profile of the female DUI offender, 3) gender-specific patterns of alcohol and drug dependency, 4) special approaches to the treatment of the female DUI offender, and 5) patterns of long-term recovery for women. The article includes recommendations drawn from the scientific literature and the authors' experience treating addicted women and evaluating gender-specific treatment programs.

Women and the State of Alcohol and Drug Studies

The number and quality of studies of alcohol- and drug-related problems, addiction and recovery among American women have significantly increased over the past two decades. In our review of the scientific literature on substance-impaired driving among women, we found that the majority of these studies had been published since 1990 and that the methodological rigor of these studies had significantly increased since 2000. A recently published review (Greenfield et al., 2007) that examined addiction treatment outcomes for women found that 90% of all of the research on gender differences in treatment outcomes had been published since 1990—40% since 2000. These studies are generating findings with significant implications for the design of intervention programs for females arrested for driving under the influence (DUI). For years, female patterns of DUI were obscured in the much larger sea of male offenders. Science has begun to open a window on this previously invisible population of women and point the direction to more effective approaches to evaluation, treatment, sentencing, and supervision.

Consumption Patterns

The best source of data available on adult patterns of alcohol, tobacco, and other drug use is the regular National Survey on Drug Use and Health conducted by the Substance Abuse and Mental Health Service Administration. The most recent of these surveys (2003) revealed that 61% of females aged 12 or older consumed alcohol during the past year and that 12% of females aged 12 and older had used an illicit drug during the past year. Data on alcohol and other drug consumption patterns of younger females is available through the annual Monitoring the Future Survey sponsored by the National Institute on Drug Abuse. 52.3% of female twelfth graders report consumption of alcohol in the past 30 days, and 24.4% of females (versus 33% for males) report having consumed 5 or more drinks in a row in the past two weeks. In 1975, the difference between males and females on this last figure was 23 percentage points, reflecting the subsequent leveling of differences in alcohol consumption patterns between women and men. Similar trends are occurring for illicit drug use with 30.1% of female high school seniors

(compared to 34.3% of male high school seniors) reporting having consumed an illicit drug in the past twelve months (Johnston et al., 2006). Older women are more likely than younger women to consume only alcohol or to consume alcohol and prescription drugs. Younger women are more likely to combine alcohol and illicit drugs (Lex, 1994).

Changes in psychoactive drug consumption by women, particularly young women, have been linked to broader changes in gender roles, and to promotional targeting of women by the alcohol, tobacco, and pharmaceutical industries special products and appeals linking these products to beauty, wealth, social popularity, sophistication, sexuality, and, perhaps most offensively, with liberation ("You've come a long way, Baby!") (White & Kilbourne, 2006). Increases in DUI arrests for women reflect both changes in social norms about women and alcohol, but also the fact that more women are driving and driving more frequently and more miles (Popkin, 1991). It is interesting to note that increased substance use among women and increased driving does not convert into risky driving decisions to the degree seen in men. The greater risk for men for DUI and DUI recidivism may well be linked to their increased propensity for impulsivity, risk-taking, and aggression than differences in substance consumption (Elliott, Shope, Raghunathan, & Waller, 2006). Females seem to drive more cautiously with or without alcohol in their systems (Zador, Krawchuk, & Voas, 2000).

DUI Prevalence Rates among Women

In the National Survey on Drug Use and Health, 11.4% of women aged 21 or over (compared to 22% of men aged 21 or over) reported driving under the influence of alcohol or other drugs in the past year (NSDUH Report, July 1, 2005). However, “as consumption increases, the male-female difference decreases and, in the heaviest drinking group, the rate of driving while intoxicated is almost as high among women as it is for men” (Johnson, Gruenwald, & Treno, 1998). While the total volume of female DUI arrest rates is far lower than those for men, DUI arrests constitute the largest category of alcohol-related crimes that bring women into contact with the criminal justice system (Parks, Nochajski, Wieczorek, & Miller, 1996). As such, these arrest events constitute a significant opportunity to intervene with women who are experiencing significant alcohol problems. Yet, few women are referred to specialized addiction treatment or to gender specific treatment.

Looking at the specific issue of drug-impaired driving, 3% of females age 12 or older (compared to 6% of males) report driving under the influence of a drug (NSDUH Report, September 16, 2003).

The gender discrepancy in these rates is further indicated in fatal crash data revealing that male drivers involved in fatal motor vehicle crashes are almost twice as likely as female drivers to be intoxicated with a blood alcohol concentration (BAC) of 0.08% or greater (NHTSA 2004b); however the percentage of male drivers in alcohol-related fatal crashes has decreased while the percentage of female drivers in such crashes have increased (Abdel-Aty & Abdelwahab, 2000). Several studies have also concluded that females are at greater risk of involvement in fatal crashes at lower levels of intoxication than are males (Waller & Blow, 1995).

DUI arrests for women have risen nationally in recent decades (Parks, Nochasjski, Wieczorek, & Miller, 1996). Studies of the DUI recidivist report that female DUI offenders are less likely to be re-arrested than are male DUI offenders. In a follow-up study of 3,425 DUI offenders, Wells-Parker and colleagues (1991) found males twice as likely to recidivate as

females. Most studies of DUI recidivists conclude that 90-95% of recidivists are male (White & Gasperin, 2007).

Profile of Female DUI Offenders

Only a small number of studies have focused specifically on the profile of the female DUI offender, and even fewer that profile the female DUI recidivist. Major findings from existing studies reveal that the female DUI offender is likely to:

- Be unmarried, separated, or divorced (Wells-Parker et al., 1991; Chang, Lapham, & Barton, 1996)
- Be unemployed and seeking employment (Wells-Parker et al., 1991)
- Be drawn from wide age span (20-50) (Wells-Parker et al., 1991)
- Be arrested secondary to a vehicular crash rather than for erratic driving (Waller & Blow, 1995).

Compared to young male DUI offenders, younger female DUI offenders are likely to exhibit greater alcohol, marijuana, and tobacco use and report more strained relationships with their parents and parental disapproval of their friends (Farrow & Brissing, 1990).

Clinical classification differences exist between men and women arrested for DUI. Wells-Parker and colleagues (1991) found that 47.3% of female DUI offenders were classified as "high-problem-risk" compared to 57% of male DUI offenders. These figures underreport alcohol problems for both men and women due to reliance on self-reported information whose validity is significantly compromised by fear of legal repercussions. A five-year follow-up study of convicted DUI offenders revealed that 85% of the female offenders (compared to 91% of male offenders) met lifetime criteria for alcohol abuse or alcohol dependence, and that 32% of female offenders (compared to 38% of male offenders) met lifetime criteria for a non-alcohol related substance use disorder (Lapham, Smith, C'de Baca, Chang, Skipper, Baum, & Hunt, 2001). A study of 1,105 DUI offenders in New Mexico found that of those with alcohol use disorders, 32% of females (compared to 38% of males) also had a drug use disorder and that 50% of women (compared to 33% of men) had an additional psychiatric diagnosis (Lapham, Smith, C'deBaca, Chang, Skipper, Baum, & Hunt, 2001). These studies underscore the high percentage of female DUI offenders that are experiencing alcohol problems and the severity and complexity of those problems.

Few studies have compared the profiles of the male and female DUI recidivist. The best data available suggests the following:

- Male and female DUI recidivists are similar in ethnicity, levels of education, BAC at time of arrest, and lifetime substance use.
- Female recidivists reported higher rates of parental alcohol problems.
- Female recidivists reported higher rates of having hit or thrown something at their spouses (Lapham, Skipper, Hunt, & Change, 2000).
- Younger female recidivists are more likely to share traits of rebellion and anti-social behavior similar to male DUI recidivists (Moore, 1994).
- Female recidivists have high rates of alcohol dependence and high rates of past year use of other psychotropic drugs (Lex, Sholar, Bower, & Mendelsoln, 1991).

Given the limited number of studies available on female DUI offenders, we have highlighted below some of the broader studies on addiction, treatment, and recovery among American women that have implications for the evaluation, treatment, sentencing, and supervision of female DUI offenders.

Female Alcohol/Drug Physiology

There are pronounced differences between men and women related to the metabolism and physical effects of alcohol. Here are the key differences:

Metabolism: Women reach higher blood alcohol concentrations and become more impaired than men after drinking the same amounts of alcohol. This is related to the fact that women have lower mean body water volume than men (creating higher alcohol concentrations) and greater difficulties metabolizing alcohol (resulting from lower levels of the gastric alcohol dehydrogenase required in the metabolism of alcohol) (Lex, 1991; Blume, 1992).

Effect of Menstruation: Blood alcohol levels for women vary across phases of the menstrual cycle. Women report becoming most intoxicated before onset of menstrual flow and least intoxicated immediately after onset. Such variation is minimized for women taking oral contraceptives. The onset and intensity of binge drinking has also been linked to pre-menstrual distress (Russell & Czarnecki, 1986)

Alcohol-related Medical Problems: Women develop alcohol-related physical problems faster than do men. Women develop alcohol-related liver disease (alcoholic hepatitis with and without cirrhosis), hypertension, anemia, gastrointestinal hemorrhage, and ulcers after shorter periods of drinking and at lower levels of alcohol intake than men. The risks for alcoholic cirrhosis and cancers of the head and neck are elevated for women who consume more than 2-5 drinks per day (Wilsnack & Beckan, 1984; Gearhart et al., 1991; Gomberg, 1993).The medical risks of alcohol consumption extend beyond the woman herself. Fetal Alcohol Syndrome / Fetal Alcohol Effect (FAS/FAE) is a preventable form of developmental disability caused by excessive alcohol consumption during pregnancy.

Alcohol-related Mortality Rates: Alcohol dependent women have higher (50-100%) mortality rates than either non-alcoholic women or alcoholic men (Hill, 1986; Gomberg & Nirenberg, 1993). Primary causes of death for alcohol dependent women include diseases of the digestive and circulatory systems, accidents (particularly alcohol-sedative combinations), suicide, and death by violence (Lex, 1991).

Incidence and Risk of Substance Use Disorders in Women

The Substance Abuse and Mental Health Service Administration's National Survey on Drug Use & Health defines substance dependence or abuse using criteria specified in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).* These criteria include such symptoms as recurrent drug or alcohol use resulting in physical danger, trouble with the law due to drug or alcohol use, increased tolerance to drugs or alcohol, and giving up or reducing other important activities in favor of drug or alcohol use. Based on the latest of these surveys, 5.9% of women aged 18 or older met criteria for abuse of or dependence on alcohol or an illicit drug in the past year. 15.7% of females aged 18-25 and 26.3% of males aged 18-25 met criteria for either dependence or abuse. Among those aged 26 or older, males were twice as likely as females to be dependent on or abusing alcohol or an illicit

drug. The rate of substance dependence or abuse for those aged 50 or older was 4.9% for males and 1.5% for females (SAMHSA, 2005).

The higher rates of alcohol dependence for males was long thought to be based on greater genetic vulnerability for alcoholism among men, but recent studies of the heritability of alcoholism have concluded that a substantial proportion (over 50%) of the risk of female alcoholism is genetically influenced (Kendler et al., 1992). Many addicted women admitted to addiction treatment, particularly those entering through a DUI referral mechanism, present with multiple etiological factors: genetic risks related to intergenerational family histories of alcoholism, a history of physical and sexual abuse; a history of emotional deprivation, anxiety, and depression that make frequent mood alteration desirable; and involvement in intimate relationships and social groups that promote excessive drinking.

Onset of AOD Problems

Compared to men, the onset of alcohol and other drug problems in women occurs at a later age and is more likely to be associated with a particular life event (e.g., childbirth, breast removal, hysterectomy, family problems, divorce, physical or sexual assault, or the loss of a parent, spouse, or child through death) (White, Woll, & Webber, 2003; Beckman & Amaro, 1986).

Female Patterns of Substance Dependence

There are many clinically relevant gender differences in substance dependence. The course of alcohol and drug dependence in women is different than men in its symptomotology and is marked by a faster progression–the latter often referred to as “telescoping” (Smith & Cloninger, 1981). Such accelerated effects were first noted in women addicted to alcohol (Corrigan, 1980; Hesslebrock et al., 1985; Stabenau, 1984). These early studies confirmed that women become physically addicted to alcohol more rapidly than men and with less volume of alcohol consumed. Later studies also discovered that women developed heroin addiction more quickly than men (Hser et al., 1990). Studies of men and women addicted to cocaine reported women had earlier onset of use, higher rates of daily use, higher risk methods of ingestion (smoking or intravenous), more concurrent alcohol use, and an earlier age of entry into treatment (Griffin et al., 1989; Wechsberg et al., 1998; McCance-Katz et al., 1999). Seen as a whole, women entering addiction treatment have fewer years of substance use than their male counterparts, but present with great medical, psychiatric, and social consequences of such use (Greenfield et al., 2007).

In spite of the severe medical consequences of alcoholism in women, female alcoholics consume less alcohol than do male alcoholics and report less daily drinking and binge drinking (Blume, 1992). The phases of alcoholism are less distinct (Lisansky, 1957) and the symptoms and stages of alcoholism differ somewhat for women. Beginning with the work of James (1975), studies have documented that several early stage symptoms of alcoholism in men constitute late stage symptoms of alcoholism in women. For example, men begin to choose substances over relationships during early stages of problem development while women cling to relationships well into the alter stages of dependence.

Addicted women are more likely than men to be using other drugs in conjunction with beverage alcohol. They frequently present patterns of multiple concurrent and/or sequential drug use (Edwards, 1985; Celentano & McQueen, 1984). Multiple drug use places women at a higher risk for cross-addiction, toxic drug interactions, and fatal overdoses.

Differences between male and female substance use patterns have been diminishing in recent years (Green, 2006).

Ethnic/Gender Differences

White, Woll, and Webber (2003) reviewed the characteristics and consequences of addiction across ethnic groups and found substantial differences. African-American women tend to be clustered at the extremes of abstinence and heavy drinking, with more African American women totally abstaining than White women (Gary & Gary, 1985). Mexican-American women abstain from alcohol or drink moderately. While the pattern of alcohol abstinence has been consistently reported for immigrant Mexican American women, there are more recent reports of moderate and heavy drinking by Mexican-American women born in the U.S. (Caetano, 1985; Gilbert, 1987). Native American women experience the highest proportion of alcohol deaths. The alcoholic cirrhosis death rate for Native American women ages 15-34 is 36 times the rate for White women; the rate for African-American women is 6 times the rate for White women (Malin et al., 1978). The addictions literature is almost completely silent on the drug consumption patterns and problems of Asian-American women.

Addiction and Psychiatric Illness

Where addicted men are more likely to experience co-morbid personality disorders, addicted women are more likely to experience co-morbid affective disorders (Wilsnack, Wilsnack, & Klassen, 1984). Addicted women are twice as likely to report major depression as addicted men (Wechsberg et al., 1994) raising the potential that some women may self-medicate affective disorders with alcohol and other drugs. The co-occurrence of eating disorders (particularly bulimia) and substance use disorders has also been noted in the clinical literature (Holderness et al., 1994).

Victimization as a Risk Factor

The relationship between childhood sexual abuse and/or subsequent sexual trauma and the onset and course of alcohol and other drug problems is a complex one. Key research and clinical findings include the following:

- Women with substance use disorders report higher rates of childhood sexual abuse compared to non-addicted women (67 percent compared to 28 percent) (Blume, 1992; Rachel, 1985; Covington, 1986a), and reports of childhood sexual abuse among addicted women seeking treatment range between 75-90 percent (Rohsenow, Corbett & Devine, 1988; Zweben, 1996).
- The link between developmental victimization and the subsequent development of substance use disorders may be intensified with the presence of key traumagenic factors, e.g., early onset of abuse, long duration of abuse, victimization by family members,

multiple perpetrators, and failure to protect following early disclosure (White, Woll, & Webber, 2003).

- Addicted women often present patterns of serial victimization–childhood sexual abuse followed by later episodes of physical and/or sexual assault (Miller et al., 1989).
- Addicted women with histories of sexual victimization have a higher incidence of health problems and health care utilization than do addicted women without such histories (Liebbschultz, Mulvey, & Samet, 1997).
- The sexual victimization of addicted women is often clinically nested within a larger cluster of problems, including feelings of depression, worthlessness, and powerlessness; suicidal thoughts; toxic, abusive intimate relationships, impaired mother-child relationships, and environmental chaos (Gomberg, 1993).
- The sexual abuse of addicted women may contribute to many of the clinical issues often noted in women's treatment programs: fear and distrust, shame and guilt, feelings of unworthiness; conflict about sex role identity; self-doubts about adequacy as a woman; and sexual dysfunction (Wilsnack, 1973; Kirkpatrick, 1986).
- The preponderance of addicted women with a history of physical and sexual abuse suggests by itself the need for special approaches to their treatment (Skorina & Kovach, 1986).

It was long thought that a sexual abuse history was predictive of poorer treatment outcome, but this assumption is being challenged by recent studies. These studies note that women with sexual abuse histories report numerous problems (depression, anxiety, low self-esteem, low decision-making confidence) at treatment admission and at follow-up, but that they are more likely than women without such histories to consume fewer illicit drugs following treatment, be in counseling for psychological problems, and to be taking psychotropic medications under the direction of a physician (Bartholomew, Courtney, Rowan-Szal, & Simpson, 2005).

Obstacles to Treatment

The percentage of women entering addiction treatment is lower than the percentage of women in the general population who have substance use disorders (Greenfield et al., 2007). Women encounter greater obstacles to initiating and completing treatment for a substance use disorder than do men (Green, 2006), although women may be more likely to seek help for substance use problems in general medical or psychiatric settings than specialty addiction treatment settings (Weisner & Schmidt, 1992). These obstacles include intense social stigma attached to addicted women (particularly addicted mothers), lack of support from intimate partners and family members, female socialization (e.g., learned helplessness, passivity), multiple role responsibilities, inadequate insurance and financial resources, fear of loss of custody of children and legal punishment (for pregnant, addicted mothers), and lack of child care, transportation, and sober housing (Gomberg, 1988; Schliebner, 1994; Burman, 1992; Finkelstein, 1994)

Treatment Entry Decisions

There is growing evidence for gender-specific factors related to the initiation of recovery (e.g., pregnancy) and in obstacles to successful recovery (e.g., intimate involvement with an

addicted husband or partner) (Anglin et al., 1987). The entry of addicted women into treatment is associated with 1) perception of alcohol or drugs as a problem, 2) life events (consequences) that precipitate a crisis and need for change, 3) the anticipation or experience of hope that treatment can produce positive change, 4) the perception that the treatment agency has programs that can respond to her special needs and the needs of her family, and 5) a social network that supports entry and continued involvement in treatment (Thom, 1984). Waldorf (1983) found women separating from addicted husbands/paramours (often subsequent to their arrest) as a major factor in initiation of natural recovery in addicted women. Similarly, Wilsnack and her colleagues (1991) found divorce or separation associated with improved post-treatment outcomes among treated, married women (Wilsnak et al., 1991).

Admissions of women to treatment have until recently been linked to health or family concerns (pregnancy, effect of use on children) than the occupational or legal issues that tend to bring men to treatment (Blume, 1992). Pregnancy and/or concern about parental adequacy are major motivators for women seeking entry into addiction treatment (Rosenbaum & Murphy, 1990; Chen & Kandel, 1998), but the increased involvement of women in the criminal justice system has sparked a dramatic increase in women, particularly younger women, entering addiction treatment.

The use of indigenous outreach workers is effective in engaging women in addiction treatment who have previously resisted seeking such services (Groos & Brown, 1993; White, Woll, & Webber, 2003).

Female Treatment Admissions

Females made up 30% (565,400) of the 1.9 million addiction treatment admissions in the United States in 2002. Females admissions were an average of 33 years of age and were more likely to report problems with opiates or cocaine (fewer problems with alcohol or marijuana), be self-referred, be unemployed at admission, and more likely to be separated, divorced, or widowed (DASIS Report, May 20, 2005).

Assessment and Treatment Process

The multiplicity of problems that characterize the lives of addicted women require a redesign of traditional evaluation and treatment processes. Assessment instruments and processes for addicted women need to be global as opposed to categorical and continuous rather than an intake activity (Wechsberg, 1995). The treatment itself needs to focus on the whole spectrum of problems presented by the addicted woman rather than focused narrowly on the problem of addiction (Brown, Huba, & Melchior, 1995; Wechsberg, 1995). The nature and number of these problems may dictate a longer period of indicated treatment for women. For example, time and physical healing may be required for alcoholic women to recover from alcohol-induced neuropsychological deficits before intensive psychotherapies can be used effectively (Hill, 1984).

Traditional confrontational approaches in addiction treatment may be highly inappropriate and even injurious for many addicted women (Murray, 1989; Nelson-Zlupco et al., 1995; Zweben, 1996). Such traditional approaches require substantial modification for clinical appropriateness and effectiveness (Brown et al., 1996). Motivational enhancement strategies offer a tested alternative to such clinical tactics (Miller & Rollnick, 1991).

In 1986, a sweeping review of the addiction treatment research concluded that there was little research evidence to support the efficacy of any particular treatment approaches for addicted women (Vannicelli, 1986). Since then, there has been an accumulation of research that is defining the major elements of an evidence-based, gender-specific, and family focused model of addiction treatment. Women-specific addiction treatment programs differ significantly in the variety, comprehensiveness, design, duration, and cost of services (Grella et al., 1999). More specifically, they:

- provide outreach services (Reed, 1987),
- focus on addiction as one of multiple problems that require service attention (Nichols, 1985; Wallen, 1992; Zweben, 1996),
- collaborate with multiple helping agencies during the treatment process (Reed, 1987),
- concentrate services in a single, non-stigmatizing service environment (Kaplan-Sanoff & Leib, 1995; Finkelstein, 1993),
- focus on the needs of the woman and her children,
- treat gynecological and medical problems (Burman, 1992),
- provide child care, transportation, and housing services (Beckman & Amaro, 1986),
- link clients to domestic violence services,
- provide strong female recovery role models (DiMatteo & Cesarini, 1986; Reed, 1987),
- provide all-female groups and female therapists, outreach workers, and case managers (Ruggels et al., 1977; Woodhouse, 1990),
- place emphasis on client empowerment via the goals of personal and economic self-sufficiency and an emphasis on choices throughout the treatment process),
- provide women-only, peer support groups within the treatment milieu encouraging sexual autonomy related to desires, preferences, and limits (Nelson-Zlupko et al., 1995),
- provide case management services to address personal and environmental obstacles to recovery,
- provide a longer duration of treatment involvement with a structured program of family-focused aftercare, and
- provide pregnancy-related services.

Treatment Outcomes

Gender in and of itself is not a predictor of treatment outcome (Greenfield et al., 2007). Addiction treatment outcomes for women are influenced by both client characteristics and program characteristics (Morrissey, Ellis, Gatz et al., 2005).

Women who complete treatment have nine times the abstinence rates at follow-up as women who did not complete treatment, whereas the abstinence rates of men completing treatment is only three times greater than men who do not complete treatment (Green, 2006).

In spite of the popular conceptions (myths) that women are hard to treat and have poor treatment outcomes, early research suggested that women do as well as men in addiction treatment (Vannicelli, 1984; Annis & Liban, 1980; Toneatto et al., 1992). More recent studies have concluded that women have better post-treatment recovery outcomes than men (Walitzer & Dearing, 2000; McCance-Katz, Carroll, &Rounsaville, 1999; Hser, Evans, & Huang, 2005; Green, 2006). The latter findings included treatment outcome studies for cocaine and methamphetamine dependence.

Studies of women-only versus gender-mixed treatment programs have produced conflicting results, with some gender-specific programs showing enhanced outcomes (Dahlgren & Willander, 1989), while others revealed no difference in outcome (Copeland et al., 1993).

There is evidence that women-only treatment programs are able to reach those women who otherwise would not seek or complete addiction treatment (Reed & Leibson, 1981). What is most clear from treatment outcomes studies of women is that women have higher retention rates and better post-treatment outcomes in programs in which great numbers of women are treated and which provide a more comprehensive range of gender-specific services (Grella & Greenwell, 2004).

Poorer treatment outcomes for women have been associated with: 1) presence of a disturbed or violent parent during childhood, 2) depression symptoms, 3) alcohol abuse and violence in partner at time of follow-up, 4) removal of children from home by authorities during follow-up period, and 5) problems handling aggressive impulses (Haver, 1986a,b; Haver, 1987a,b; Bergman & Bergman, 1985). Involvement with an addicted partner is a major etiological factor in the onset of excessive alcohol and drug use for women and a major barrier preventing the addicted woman from entering treatment or sabotaging her ongoing recovery efforts (Lex, 1994). It should not be surprising then that unmarried women have better post-treatment recovery rates than those who are married (McCrady & Raytek, 1993). Involvement in methadone treatment has been shown to provide structure and stability in the life of opiate-addicted women, but many of these women express concerns about the stigma related to their continued use of methadone (Rosenbaum & Murphy, 1990).

Three recently completed reviews of addiction treatment outcome studies on women (Greenfield, Brooks, Gordon et al., 2006; Claus et al., 2007) draw the following conclusions:

- Women with AOD problems are less likely to enter treatment than men with such problems.
- Treatment retention and completion rates are similar for women and men.
- Women as a group do better in residential modalities than modalities of lower intensity.
- Women do better in treatment programs that offer regular individual counseling in addition to non-confrontational group counseling.
- Retention and longer length of treatment is associated with better treatment outcomes for both men and women.
- Provision of child care services increases retention and the positive effects of treatment.
- Provision of case management services improves retention and outcomes.
- Women have better long-term outcomes following treatment than do men.
- Gender-specific treatment is effective, but study findings vary on the question of whether gender-specific treatment is more effective than mix-sexed treatment. Claus and colleagues (2007) conclude that "women admitted to women-only programs have better retention and better outcomes relative to traditional mixed-gender programs" (p. 27).

Processes and Stages of Recovery

Women have shorter alcoholism careers. Fillmore (1987) found that heavy drinking for

women peaked in their thirties and then dropped sharply during their forties and beyond, with a substantial number of women ceasing alcohol consumption after age 60. Fillmore concluded that, in comparison to men, remission of heavy drinking is more likely and more likely to occur earlier. There is further evidence that women have greater prospects for long-term recovery than do men. Humphreys and his colleagues found in a follow-up study of clients eight years post-discharge that women were 1.63 times more likely to be in stable recovery (Humphreys et al., 1997). The greater prospects of recovery may also extend to women addicted to drugs other than alcohol. Snow (1973) reported that women addicted to opiates had better long-term recovery rates than men with similar addiction patterns.

Recovery without Treatment/Moderated Recovery

Many young women aged 21-34, who as a group report the highest incidence of alcohol-related problems, will resolve these problems without treatment (Wilsnack, 1989). Such "natural recovery" (the achievement of recovery from addiction without the aid of professionally-directed treatment or sustained involvement in mutual aid groups) is more common in women than in men. In a recent study of natural recovery in women, Copeland (1998) found three themes in the resolution for change decisions: 1) concern for current and future health, 2) a lost sense of self, and 3) concern over the welfare of their children. Strategies that women use to self-manage their own recovery process include management of withdrawal, short-term drug substitution, severing drug-dominated intimate and social relationships, developing new social activities and relationships, and the cultivation of new health-promoting behaviors, e.g., nutrition, fitness, alternative medicine (Copeland, 1998). Those women who cannot achieve natural recovery when compared to those who do are found to have greater problem severity, greater psychiatric co-morbidity, and fewer family and social supports.

Gender differences are also noted in the literature about persons with alcohol problems who resolve such problems through moderating their use rather than by complete abstinence. Sanchez-Craig and her colleagues (1991) and others (Elal-Lawrence et al., 1986) have noted that women are more likely than men to achieve successful moderation outcomes. Again, this may be related to the Mohr study (2001) findings that women had richer non-drinking social relationships than men and that such relationships enhanced not only successful abstinence but also served to lower the number of drinks per drinking day among those who did drink. Successful moderation is linked to lower personal vulnerability (e.g., absence of family history, later onset of alcohol/drug use), absence of co-occurring medical/psychiatric illness and significant family and social support (White & Kurtz, 2006).

Recovery Support Structures

Women and cultural minorities affiliate with AA/NA at the same rates as White men (Humphreys et al., 1994) and at least one report suggests that women may have an easier time affiliating with 12-step groups than do men (Denzin, 1987). This may be related to the fact that alcoholic women are more socially isolated (tell fewer individuals about their drug-related problems) and have less support from their partners for recovery (Bischof et al., 2000). The percentage of women among AA members has increased from 15 percent in 1955 to 33 percent in 1996 (White, 1998). Special women's groups within AA grew during these same years. There are feminist-based alternatives to AA (Kirkpatrick, 1978), and AA's steps have been refined for

greater applicability for women (Kasl, 1992; Lerner, 1990). There is also evidence that women, particularly African-American women, may use the church as a sobriety-based support structure (White, Woll, & Webber, 2003).

Substance Use and Partner Violence

Alcoholic women tend to select mates who come from family backgrounds similar to their own (Rimmer & Winokur, 1972). This process is referred to as "assortative mating" (Lex, 1991) and has been linked to the victimization histories of addicted women. The research literature on addicted women portrays a picture of unstable marital/intimate relationships characterized by low levels of emotional satisfaction and increased levels of marital conflict that can escalate into the emotional/physical abuse of the alcoholic woman. This picture must be viewed in the context of the high rate of victimization of these clients. Research has confirmed the propensity of traumatized women to "repeat and re-enact subordination and victimization in their interpersonal attachments" (Bollerud, 1990). Breaking these cycles of victimization requires specialized treatment approaches (Herman & Schatzow, 1984).

Sentencing Issues

Few studies have distinguished the effectiveness of particular DUI sanctions by gender. One notable exception to this rule was a study of the effects of victim impact panels on DUI recidivism. That study found that female repeat offenders who were referred to victim impact panels were twice as likely to recidivate as female repeat offenders not referred to a panel (C' De Baca, Lapham, Liang, & Skipper, 2001). The authors suggested the possibility that victim impact panels could actually have a negative effect on the female repeat offender. The potential effectiveness or ineffectiveness of remedial education for the female DUI offender may well be an issue of timing. We suspect that early exposure to an impact panel may elicit too much empathy for women already steeped in self blame and may increase her risk of drinking due to shame and guilt, while introducing it later might prove beneficial.

As we proceed into tips for enhancing recovery, it is important to note that while we are sensitive to the plight of addicted women, including their history of trauma, stigma, and sexism, we are not even remotely suggesting that consequences of her behavior be lightened in any way. In fact, we believe the reverse: a) the cornerstone of recovery is accountability, b) her DUI is an opportunity to launch that recovery, c) the courts can be the glue to hold her in place, while addiction interruption techniques are applied and monitored, d) these interventions enhance public safety and affect the lives of her children, and e) her recovery can eliminate her future involvement in civil and criminal proceedings and the child welfare system.

The achievement of such goals is possible with increased referrals of female DUI offenders to treatment, through collaboration between the criminal justice system and addiction treatment, through the development of gender competence via training, the design of gender specific and stage appropriate interventions, and by gender competent supervision of both criminal justice and treatment personnel.

Tips for Enhancing Recovery among Women

Judges, prosecutors, police, hearing officers, probation and parole officers, evaluators, and treatment specialists all have an opportunity to interact with women who have driven under

the influence of alcohol and who have significant alcohol and other drug related problems. These interactions offer tremendous opportunity to influence movement toward sustained recovery, especially when these systems work in cooperation and collaboration. We offer a few simple tips to enhance effectiveness, increase accountability, improve outcomes for addicted women, increase public safety, and reduce the burden of multiple systems that often become involved in the lives of addicted women and their families as their addiction progresses.

Developmental Stages of Recovery

Recovery for most addicted women is a time and mastery-involved developmental process. Confirming these observations was a recent study (Brown et al., 2000) concluding that women may be at different stages of change for different problems, e.g., substance use, high risk sexual behaviors, violent relationships, child neglect, and that such change processes must be simultaneously managed. Relapse is often part of the early recovery process for many women. Such relapses can involve the primary drug to which the woman was addicted or the use of secondary drugs. Willie (1978) reported that recovered heroin addicts used drugs such as alcohol and cannabis in the first year to cope with the challenges of early recovery. Willie framed such use not as substitute addiction but as an "intermediary stage" of recovery. Similar findings occurred in Copeland's (1998) study of natural recovery in women. All of the women noted to have developed an initial problem with a substituted drug later resolved this problem. While there is a very real danger of transferring dependencies e.g., progressing from heroin to cocaine or alcohol, episodes of drug substitution are best seen as part of the early recovery process requiring active management than an indicator of either the untreatability of the client or the failure of a particular treatment method.

Within each stage of recovery are developmental tasks, skills to be mastered, and certain issues to be addressed before movement to the next stage can occur. An otherwise appropriate intervention may be ineffective or pose iatrogenic risks when utilized in anther stage. We recommend several resources that discuss the stages of recovery.

- *Changing for Good* by John Prochaska, John Norcross, and Carlo DiClemente, which demonstrates that timing in partnership with the appropriate intervention can interrupt addictive patterns.
- *The Varieties of Recovery Experience* by William White and Ernest Kurtz, which is included in a monograph entitled Recovery Management that is distributed by the Great Lakes Addiction Technology Transfer Center.
- *Project SAFE: A Developmental Model of Recovery* by William White, Maya Hennessey, Deb Oberg, and Diane Sonneville, summarizes a study of recovering women in Illinois' Project SAFE sites—an award winning program that treated women with histories of addiction-related abuse or neglect of their children.

The following are stages of recovery identified among women involved in Project SAFE women, many of whom had been involved with the criminal justice system as DUI offenders prior to or during their involvement with the child welfare system.

Stage One - Cognitive Impairment & Toxic Dependencies

Years of alcohol and other drugs abuse combined with trauma from histories of physical and sexual abuse results in cognitive impairment, and women who perceive the world as a predatory jungle in which physical and psychological safety is nonexistent compulsively seek momentary relief in alcohol and other drugs. The women bring dependencies on alcohol and other drugs, abusive relationships, and institutions such as child welfare, public health, or criminal justice, systems that often have the effect of sustaining rather than breaking this larger pattern of dependency. The courts have an opportunity to be the glue that holds her in place, while gender competent evidence-based approaches begin to interrupt the addictive patterns and start to build recovery capital. The most effective methods for initiating change in women who are in stage one include providing rapport, safety, and clear expectations; monitoring her performance; and conveying hope and praise.

Establish Rapport and Safety. A therapeutic alliance that fosters change includes respect, rapport, and safety. With histories of physical and or sexual abuse that spanned early developmental years through their adult lives, women in recovery talk about kindness from authority as if it were a rare and precious commodity. With harshness, her anxiety level soars, she closes up, and loses the capacity to hear you—she is frantically trying to defend herself. In an environment of safety and kindness, she opens up, sparking motivation to comply with your expectations.

Set Clear Expectations and Monitor Performance. Communicate in behavioral and measurable terms what is expected, acknowledge positive recovery-related activities, and continue to monitor her compliance with positive feedback and support.

Convey Hope and Praise. Hope and affirmation are the lifeblood of recovery for women. Most addicted women have been socially stigmatized, victimized, and blamed by systems they have reached out to. Hungry for approval from authority, acknowledging her positive efforts will motivate her and other women witnessing such praise. In this early stage—a stage often characterized by dependent relationships with abusable substances and abusive people, living in environments that are chaotic and traumatizing, and intense cravings, she may be constitutionally incapable of a self-initiated, spontaneous break in this dependent lifestyle. The spark that can ignite the recovery process must come from without, not within.

Stage Two - Shifting Dependencies

Initially, as addictive patterns are being interrupted, motivation for change is non-existent, low, or fleeting. Early recovery is marked by ongoing battles with cravings, interruptions in addictive patterns, decreasing dependence upon drugs and unhealthy relationships, fueled by glimmers of a better life via increasing involvement in the recovering community. This is a challenging time, as she maintains a foot in both worlds—addiction and recovery—gingerly stepping backward and forward, learning and unlearning, belonging and breaking away. Addiction treatment fuels the woman's internal battles between the promises and threats of each of the two worlds beckoning her. The seduction of both worlds evokes emotional thawing that gives way to flashbacks of trauma, guilt, regrets, and shame. While painful, this also for many serves as reminders of a life of which she wants to be free. Inside of every woman are motivators for becoming stronger and clearer with each passing day without alcohol and other drugs.

Discover and Ignite Her Motivators. Every woman will easily reveal what motivates her when we set aside our own biases, values, and beliefs. If you don't believe us, for the next week,

ask every woman you meet the same question, nothing deep or personal, but something as simple as:

- Best birthday you ever had or
- Something you enjoy.

As she answers, she will reveal her values, beliefs, and motivators. Just as each woman has a unique face and personality, each possesses a unique set of values, beliefs, strengths, weaknesses, and interests. By listening carefully you will discover her unique motivators and how to ignite those. She will easily share those ***when she feels safe, and when she feels heard.***

Help Each Client Increase Her Recovery Capital. Recovery capital is the internal and external resources that can be mobilized to initiate and sustain recovery. Here are examples of recovery capital:

- Social Capital – Social relationships that encourage and support recovery.
- Physical Capital - Financial motivators such as income, savings, a home, investments.
- Human Capital - Knowledge, skills, health, problem solving abilities.
- Cultural Capital - Beliefs, behavioral patterns, qualities that emanate from membership in a particular culture that encourage recovery.
- Values - Developing recovery values such hoping recovery is possible, and growing to be believe she is worthy of the life that recovery promises.

The following is an assignment given to help one woman expand her recovery support resources by recognizing, acknowledging, and enhancing her recovery capital. She wanted to get her GED but suffered from testing anxiety and the distress of withdrawal from alcohol and other drugs. Her counselor gave her this assignment.

- *Go to the library and request information on getting a GED. Don't sign up yet if you feel overwhelmed, just get the information.*
- *Ask women in AA who got their GEDs in recovery to share when, where, how, and any obstacles they overcame to get their GED.*

This assignment helped her understand the GED process and allowed choices about when to begin. Studying for the GED built confidence, enhanced motivation, and instilled hope that she could learn, grow, and change. Talking to other women helped her discover options at the same time building a recovery support network.

Stage Three – Sisterhood in the Recovering Community

As women begin to experience themselves as part of a broader community of recovering women, they come together collectively to fight back against shame and stigma to restore their honor and self-respect both as women and as mothers. This stage marks the beginning reconstruction of self that will continue throughout the lifelong recovery process.

Start a Women's Self Help Group. In communities that do not have women's meetings of AA, NA, etc., you may want to help develop such a meeting by inviting AA / NA volunteers to start up meetings and conduct them at your court. Developing such resources can be aided by working with current Hospital and Institution Committees within AA or NA or by setting up an AA/NA advisory group.

Explore Group Supervision. Because women are very relationship oriented, they do very well in groups. But, because relapse is common in early recovery, groups for women who are still using get the best outcomes when staff is trained in women's issues, addiction interruption techniques, and running effective groups. Once mastered, these skills can be important recovery support resources, particularly in communities lacking women's groups in AA and NA.

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“No Failure. Just Feedback.” A key to ongoing recovery is the ability to explore what doesn't work, learn from it, and practice new strategies. Women in early recovery suffer from the combined effects of trauma, withdrawal and cognitive impairment of early recovery. Rather than attributing deviant behavior as a personal failure, well trained staff are able to assess and adapt approaches before assuming rebellion and imposing sanctions. As a result, women learn from their mistakes, are empowered to keep trying, recovery capital is increased, and outcomes improved.

Visit Local Treatment Programs for Women. Visiting local treatment programs that have gender competent services for women will breathe life into your knowledge of women and addictions. Collaboration improves outcomes, eases the referral process for you, and will help you align your goals and her goals in treatment. Considering that women who complete treatment have nine times the abstinence rates as women who did not complete treatment, it is well worth it to have a good working relationship with treatment programs.

Visit Open Recovery Support Meetings. We recommend acclimating yourself to local recovery support groups by reviewing literature and websites of such groups (see www.facesandvoicesofrecovery.org, click mutual aid resources) and attending open meetings. You can contact AA (and often NA) through the Yellow Pages of the phone book. Your work will be enriched by hearing the powerful stories of women in long-term recovery whose lives, now meaningful and productive, were once as chaotic and problem-ridden as those of the female clients you now serve. Your ability to understand the core ideas, language, and rituals of recovery groups will dramatically enhance your ability to link women to these groups and monitor their participation. You will meet women today who are honest, hard working, reliable, mothers, wives, and friends, because someone just like you saw beyond their problems, held them accountable, and encouraged them to hang in there for the miracle of recovery.

Stage 4 - Blending Internal and External Worlds of Recovery.

Self continues to be defined in Stage 4 through external relationships in self-help, churches, yoga centers, job training, parenting classes, workshops, and gatherings of recovering women. A period, perhaps even a sustained period, of extreme dependence upon these support structures can be the critical stage in the movement towards long-term recovery. This period constitutes a period of decompression from the toxicity of the culture of addiction and a period of incubation within which the self and self-world relationship are reconstructed.

Attend Meetings And Hear Her Story. Encourage current and former clients to invite you when they share their story at an open meeting. Most women will appreciate your interest and be proud to have you there. You will be surprised to learn new things about her as she pours out her truth the AA way. What you learn from her is sure to improve your insights into women who appear in your court. The nature of the developmental stages of recovery is shaped by the characteristics of the individual, the intensity and duration of drug use, and the social milieu within which recovery occurs.

Developmental stages of recovery, while highly similar within subpopulations of addicts, may differ widely from subpopulation to subpopulation, but must be strategically selected to resolve key issues and achieve mastery over key developmental tasks inherent with each individual's current stage of recovery. Every woman in the throes of addiction longs for a better life, but without stage appropriate interventions, she remains baffled and helpless to break out. As the courts hold her accountable and she moves through the stages, she will reach a place, likely long after the courts have closed her case, where she will be transformed.

- Where movement towards her personal aspirations will be reflected in achievement of some personal milestone, e.g. completing high school, getting into college, and gaining employment.
- Where she will have created a social network in which relationships are characterized by mutual respect and support.
- Where her life is organized around a set of clearly defined values and beliefs that supports her recovery, as well as the recovery of others.

All this and more becomes possible because Judges, prosecutors, police, hearing officers, probation and parole officers, evaluators, and treatment specialists applied gender competent, cost effective humane interventions in their interactions with female DUI offenders.

Future Directions

Having reviewed the available research literature on female DUI offenders and the broader literature on the treatment of women and having interviewed female DUI offenders and those providing services to these women, we would offer the following ten recommendations related to enhancing the quality of evaluation, education, treatment, and supervision of female DUI offenders.

1. Evaluation Instruments: Develop gender norms for existing evaluation instruments and/or develop an instrument or subscales based specifically on research with, at best, female DUI offenders, and at least, community and clinical samples of women.
2. Gender Competent Evaluators: Require all DUI evaluators to complete gender-competent training on women's issues.
3. Recidivist Risk Profile: Develop a DUI recidivist risk profile that is based exclusively on research with female DUI offenders.
4. Gender-specific Risk Education: Audit and revise existing remedial education programs to assure gender competence. Segregate women into specialty groups when there are enough women.
5. Gender-specific DUI Treatment Models: Develop models for treating female DUI offenders that incorporate current research findings.
6. Gender-specific Treatment Specialty: Encourage the development of gender-specific DUI treatment services to assure enough referrals to organize women's groups.
7. Women's Recovery Support Groups: Develop a directory of women's recovery support groups. Establish guidelines for liaison committees between the courts, treatment agencies, and recovery mutual aid groups. Develop women's recovery support groups in communities where they do not exist. Recruit AA/NA volunteers to orient new judges, probation officers, and other service roles to local recovery support groups.
8. Alumni Volunteers: Recruit, train, and supervise a cadre of women in recovery who came through the DUI system who can serve as volunteer recovery coaches to women currently entering the system.
9. Consumer Feedback on Services: Conduct a survey of female DUI offenders to solicit feedback related to evaluation, treatment, and probation services they have received.

10. Gender-research: Encourage all studies done on DUI to analyze data for gender differences.

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