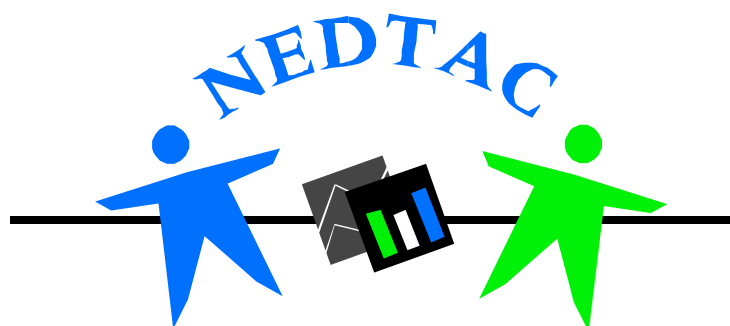


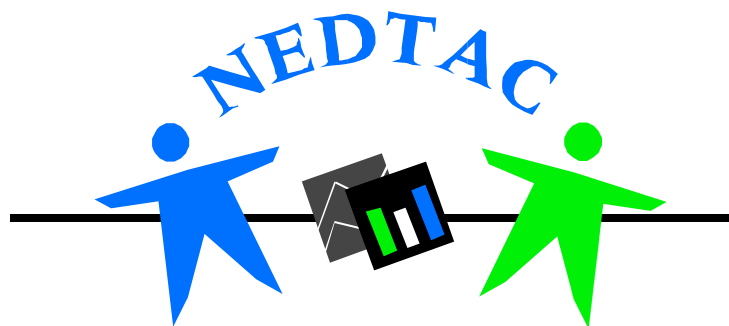
**NATIONAL EVALUATION DATA AND
TECHNICAL ASSISTANCE CENTER**



**ISSUES IN SUBSTANCE ABUSE TREATMENT FOR
PREGNANT AND POSTPARTUM WOMEN AND THEIR
CHILDREN: ANNOTATED BIBLIOGRAPHY, 1993-1998**

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CSAT
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FOREWORD

One of the missions of the Center for Substance Abuse Treatment is to enhance the nation's substance abuse treatment system by identifying, developing, and supporting appropriate policies, approaches, and programs. In short, for the field of substance abuse treatment, CSAT seeks to determine what works for whom, how well, and at what cost.

Building knowledge through evaluation is the key to answering these questions. From CSAT's perspective, evaluation—including cost analysis and performance measurement—is an integral component of program management and part of an ongoing process of knowledge development, assessment, and improvement. Toward this end, CSAT's Program Evaluation Branch established the National Evaluation Data and Technical Assistance Center (NEDTAC) to advance state-of-the-art evaluation in the field of substance abuse treatment.

As part of its mission to further the development and dissemination of knowledge in the treatment field, NEDTAC produced a series of bibliographies in key topic areas. This document belongs to that series. As a part of that series, this document focuses on three issues in evaluation of residential women and children/pregnant and postpartum women treatment programs: Appropriate Length of Stay, Client Factors that Predict Retention and Successful Completion, and Improvement of Child Health and Welfare.

This bibliography, along with others in the series, was developed under the guidance and direction of the NEDTAC Government Project Officer, Ron Smith, Ph.D., Program Evaluation Branch, Office of Evaluation, Scientific Analysis, and Synthesis. We also wish to thank Tracey Fenwick for compiling and Beth Archibald Tang for reviewing this document.

Sharon Bishop
Director
National Evaluation Data and
Technical Assistance Center (NEDTAC)

I. APPROPRIATE LENGTH OF STAY

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Glider, P., Hughes, P., Mullen, R., Coletti, S., Sechrest, L., Neri, R., Renner, B., & Sicilian, D. (1996). Two therapeutic communities for substance-abusing women and their children. In E.R. Rahdert (Ed.), Treatment for drug-exposed women and their children (NIDA Research Monograph No. 166, pp. 32-51). Rockville, MD: National Institute on Drug Abuse.

This chapter discusses issues encountered by two research demonstration programs in developing clinical laboratories. Both programs proposed randomized clinical trials to determine the efficacy of allowing substance-abusing women to reside with their children in a therapeutic community (TC). Substance-abusing pregnant women and women with children admitted to a TC had better than expected post-discharge outcomes. Improved outcomes included decreased substance use and criminal behavior, increased employment, improved self-concept, and improved parenting skills. These outcomes improved with longer stays in the residential program. Problems encountered and solutions are described.

Kelly, V.A., Kropp, F.B., & Manhal-Baugas, M. (1995). Association of program-related variables to length of sobriety: A pilot study of chemically dependent women. Journal of Addictions and Offender Counseling, 15(2), 43-50.

Data from the Women's Residential Addiction Program (WRAP) were used to assess the association of program-related variables as predictors of effective treatment for women dependent on alcohol and/or other psychoactive substances. WRAP's program consists of 2 to 3 months of residential treatment, a transitional phase of at least 3 months, and aftercare services. Study participants were grouped by those who had 6 months of post-treatment sobriety; those who had 1 or 2 months of post-treatment sobriety, but had a documented relapse; and those who relapsed prior to completion or shortly after leaving treatment. Program-related variables included outside mental health treatment obtained, family program attendance, children in residence, vocational or educational programming, participation in counseling for physical or sexual abuse issues, aftercare, and referral source. Significant variables related to length of sobriety included active participation in aftercare programs and vocational and educational programming. Treatment for physical and verbal abuse issues and family programming participation were not significantly related to length of sobriety, but because a history of abuse is a major relapse issue for chemically dependent women, concurrent treatment is recommended.

Smith, E.M., North, C.S., & Fox, L.W. (1996). Eighteen-month follow-up data on a treatment program for homeless substance-abusing mothers. In G.J. Stahler, & B. Stimmel (Eds.), The effectiveness of social interventions for homeless substance abusers (pp. 57-72). New York: Haworth Medical Press.

In response to the dearth of data on substance abuse treatment among homeless mothers, this study presents 18-month follow-up data on 149 homeless mothers with young children enlisted in

a substance abuse treatment program. The effects of residential compared to nonresidential services were evaluated over the follow-up period. Although dropout rates were high, predictors of dropout were identified, and the residential group had a lower dropout rate than the nonresidential comparison group. Members of both residential and nonresidential groups showed improvement in alcohol and drug problems and in housing stability, regardless of the amount of time they spent in the program. This project demonstrated that homeless mothers can be more successfully engaged in substance abuse programs with provisions of residential placement in addition to participation in a therapeutic community. (Author abstract modified)

Wobie, K., Eyler, F.D., Conlon, M., Clarke, L., & Behnke, M. (1997). Women and children in residential treatment: Outcomes for mothers and their infants. Journal of Drug Issues, 27, 85-606.

This article examines the relationship of the living arrangement of a mother and her baby in a residential treatment center with measures of self-esteem, depression, parenting sense of competence, length of stay, and treatment completion. Scores on the Bayley Scales of Infant Development are also examined by the amount of time the baby spent with mother, an arrangement that affords the opportunity for the child to participate in the facility's therapeutic child care center. Findings suggest that the earlier an infant resides with the mother in the treatment setting, the longer the mother's length of stay will be, with an increased opportunity for program completion. In addition, measures of depression were lower and measures of self-esteem were higher for women with their babies than for clients who did not have their infant in the treatment facility. Scores on the Bayley Scales of Infant Development were within normal limits for all infants living with their mothers in treatment.

II. CLIENT FACTORS THAT PREDICT RETENTION AND SUCCESSFUL COMPLETION

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Bass, L., & Jackson, M.S. (1997). A study of drug-abusing African-American pregnant women. Journal of Drug Issues, 27, 659-671.

Many studies have focused on pregnant women who have used crack cocaine and other drugs during pregnancy, but few have interviewed the women either during pregnancy or after delivery while undergoing residential care and the recovery process to determine what they feel their program needs are in an effort to ensure successful treatment. This exploratory study was undertaken specifically to consider not only drug-use patterns and sexual risk behaviors, but primarily to consider what characteristics the women felt would make drug treatment intervention strategies more effective for them and their families, including the significant other in their lives. Interviews were conducted at three women's residential treatment facilities, as well as at home, after program discharge. Eighty-three women participated in this project, which was both quantitative and qualitative. There is discussion of the nurturing program that should be considered for use with this population. (Author abstract modified)

Britt, G.C., Knisely, J.S., Dawson, K.S., & Schnoll, S.H. (1995). Attitude toward recovery and completion of a substance abuse treatment program. Journal of Substance Abuse Treatment, 12, 349-353.

This study tested the ability of the Recovery Attitude and Treatment Evaluator (RAATE) to predict attrition from treatment for pregnant and postpartum substance-abusing women. During the first month of treatment, RAATE was completed by both the clinician and the patient. Three types of discharge statuses were considered: completion of the treatment program, drop out, and administrative discharge. No group differences were found concerning the clinician version of the RAATE. Initial analyses of the patient version revealed that subjects who completed the program had lower ratings of resistance to treatment and continuing care compared to those who dropped out; further analysis suggested that those who completed less than 1 month of treatment exhibited the highest resistance. These results suggest the RAATE is a potentially effective tool for predicting early attrition from substance abuse treatment in this population.

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

Utilizing an expanded concept of level of burden, the impact of multiple problems experienced by women in a residential drug abuse treatment program on treatment retention and outcome is investigated. Level of burden is defined in this study as the number and severity of problems, including psychological problems, cognitive impairment, chronic health problems, HIV/AIDS status, as well as substance abuse. In the first study of 260 women, the ability to retain women in treatment as a function of their level of burden is examined using the technique of survival

analysis. Results indicate that early in the course of treatment, high-burden clients tend to be at highest risk for early termination. In addition, there is a significant interaction between time in the program and level of burden. In the second study of 68 women, partial correlations between level of burden and ratings of outcomes by program staff at time of discharge are examined. Results show that many of the treatment outcomes are significantly negatively correlated with the initial levels of burden.

Center for Substance Abuse Prevention. (1993). Maternal substance use assessment methods reference manual: A review of screening and clinical assessment instruments for examining maternal use of alcohol, tobacco, and other drugs. Rockville, MD: Author.

Written for social service providers who work with pregnant and chemically dependent women, this manual provides examples of 40 different screening and clinical assessment instruments with a one-page abstract. The abstracts include information on source and ordering, an overview of the instrument, possible advantages and disadvantages of using the instrument, a discussion of developmental and/or psychometric components, and references. The guide also delineates the difference between screening instruments and clinical assessment instruments, discusses the various issues involved in using self-reported data, outlines the evolution and application of evaluative criteria to review instruments, and addresses topics related to cultural sensitivity.

Center for Substance Abuse Treatment. (1993). Improving treatment for drug-exposed infants (Treatment Improvement Protocol Number 5). Rockville, MD: Author.

In utero exposure of infants to illicit drugs is examined, with a focus on in utero exposure to cocaine, heroin and other opiates. The overall problem of drug-exposed infants and their families is discussed. Medical management, follow-up and aftercare, psychosocial services, and ethical and legal guidelines are explored. Detailed guidance is provided on diagnoses of in utero drug exposure, assessment of the neonate, and effects on and treatment of infants affected by in utero exposure, including pharmacologic interventions for the opiate abstinence syndrome and cocaine neurotoxicity. Clinical assessment tools are recommended. Strategies are discussed for promoting positive mother-infant interaction immediately after birth. A multi-risk approach focusing on environmental factors including drug exposure is discussed for postpartum interventions. Early intervention services and desirable outcomes are also described. Key components of psychosocial services for families of drug exposed infants are noted, paramount among which is drug abuse treatment for the mother. Strategies for keeping families intact are discussed. Finally, guidelines are presented for some key aspects of quality assurance of service provided to AOD using and abusing women and drug exposed infants.

Condelli, W.S. (1994). Domains of variables for understanding and improving retention in therapeutic communities. International Journal of the Addictions, 29, 593-607.

This article discusses the value of different domains of variables for understanding and improving retention in therapeutic communities for substance users. Retention is important because therapeutic communities have high rates of attrition, and no other variables have been found to have practical implications for improving client outcomes from programs. Research shows that most client variables do not predict retention, and those that do are generally weak and sporadic predictors. Treatment entry variables have been stronger and more consistent predictors of retention. The small amount of research that has been done on program and treatment variables suggests they are important predictors of retention. Research needs to focus less on client variables and more on variables from the other domains if it is to be more useful for understanding and improving retention in therapeutic communities.

Condelli, W.S. & Hubbard, R.L. (1994). Client outcomes from therapeutic communities. In F.M. Tims, G. De Leon, & N. Jainchill (Eds.), Therapeutic community: Advances in research and application (NIDA Research Monograph Number 144, pp. 80-98). Rockville, MD: National Institute on Drug Abuse.

Research on client outcomes from therapeutic communities and other types of residential treatment programs for substance abusers are discussed. Findings from two large studies of therapeutic communities, the Drug Abuse Reporting Program (DARP) in the early 1970s and the Treatment Outcome Prospective Study (TOPS) in the early 1980s, are compared. These studies evaluated the effectiveness of U.S. drug treatment programs. Characteristics of clients from the therapeutic communities are compared with those of clients from other long-term TOPS residential programs. The effects of both types of programs on client outcomes were assessed, taking into account client characteristics and drug treatment during the follow-up year.

Copeland, J., Hall, W., Didcott, P., & Biggs, V. (1993). A comparison of a specialist women's alcohol and other drug treatment service with two traditional mixed-sex services: Client characteristics and treatment outcome. Drug and Alcohol Dependence, 32, 81-92.

Eighty subjects from a specialist women's service (SWS) and 80 subjects from two traditional mixed-sex treatment services (TMS) were recruited to a comparative, longitudinal study of changes in alcohol and other drug associated problems. Both the SWS and the TMS programs were principally based on the traditional disease model and 12-step philosophy, but the SWS employed only female staff and provided residential childcare. The SWS succeeded in attracting significantly more lesbian women, women with dependent children, women sexually abused in childhood, and women with a maternal history of substance dependence than the TMS. Six months following treatment there were no significant differences in any measure of treatment outcome between the two treatment groups. The results suggest that the simple provision of women-only treatment and child care without changing treatment content does not substantially

improve treatment outcome in women with severe alcohol and other drug related problems.
(Author abstract)

Farkas, K.J., & Parran, T.V. (1993). Treatment of cocaine addiction during pregnancy. Clinics in Perinatology, 20, 29-45.

The treatment of cocaine abuse among pregnant women involves attention not only to the cocaine use, but also to the pregnancy and the myriad of medical and social problems that substance-abusing women experience. Programs must address not only the drug treatment needs, but also recognize that cocaine-abusing pregnant women will soon be new mothers. It is imperative that women's programs include young children as part of the target group and integrate parent education and support to develop and strengthen women's abilities to nurture and protect children. Model programs, both residential and outpatient, that provide care and services for young children exist, but these programs are the exception rather than the rule. The intergenerational nature of substance abuse certainly argues for treatment not only for the mothers, but also for their children.

Hagan, T.A., Finnegan, L.P., & Nelson-Zlupko, L. (1994). Impediments to comprehensive treatment models for substance-dependent women: Treatment and research questions. Journal of Psychoactive Drugs, 26, 163-171.

This article discusses several issues brought into treatment by women and how these issues impact current treatment models. This article focuses on three critical factors overlooked in treatment and research related to women: broader issues of dependence in women; the impact of chaotic early interpersonal relationships on developmental levels; and diagnostic criteria and treatment goals appropriate for women. Finally, this article provides an understanding of the impact of these factors on treatment and on research methodologies in order to provide and evaluate comprehensive and effective treatment for drug-dependent women.

Henderson, D.J., Boyd, C., & Mieczkowski, T. (1994). Gender, relationships, and crack cocaine: A content analysis. Research in Nursing and Health, 17(4), 65-72.

Past research has indicated gender differences among narcotic users that have implications for the prevention and treatment of substance abuse; however, little is known about these differences among crack cocaine users. The purpose of this secondary analysis was to compare the relational context of male and female crack cocaine use. Data from open-ended, structured interviews with 46 predominantly African-American women (N=23) were compared using manifest content analysis. Women were more likely to begin, use, and/or maintain their use of crack in the context of more intimate opposite sex relationships, while men were more likely to begin their use with male friends and associates and to maintain drug use with income from jobs and selling drugs.

Overall, relationships (both sexual and familial) were a more prominent aspect of crack use for women while entrepreneurship was more salient for men.

Higgins, S.T., Budney, A.J., Bickel, W.K., Badger, G.J. (1994). Participation of significant others in outpatient behavioral treatment predicts greater cocaine abstinence. American Journal of Drug and Alcohol Abuse, 20, 47-56.

This article identifies predictors of cocaine abstinence during outpatient behavioral treatment for cocaine dependence. Fifty-two cocaine-dependent adults participated in a 12-week treatment program; stepwise logistic regression was used to identify predictors of abstinence of participants. Demographic, drug use, and other subject characteristics were examined. The single best predictor of cocaine abstinence was whether a significant other participated in treatment. The odds of achieving a criterion level of cocaine abstinence were approximately 20 times greater for subjects who had a significant other participate in treatment. Importantly, significant others participated in a structured form of relationship counseling and behavioral contracting that is well specified and can be readily tested in a prospective, randomized trial.

Hiller, M.L., Rowan-Szal, G.A., Bartholomew, N.G., & Simpson, D.D. (1996). Effectiveness of a specialized women's intervention in a residential treatment program. Substance Use and Misuse, 31, 771-783.

Time Out for Me, a specialized psycho-educational treatment effective with women in an outpatient methadone clinic, was tested for generalizability to a residential drug user treatment program. The six-session module was first given to an experimental group (n = 11) and compared to a control group (n = 10). The treatment was associated with increases in knowledge of human sexuality, assertiveness, and communication skills; more positive attitudes toward being assertive and practicing safer sex; and increased self-esteem. Preliminary findings suggest this treatment enhancement may be further explored with women in residential treatment.

Howard, J., & Beckwith, L. (1996). Issues in subject recruitment and retention with pregnant and parenting substance-abusing women. In E.R. Rahdert (Ed.), Treatment for drug-exposed women and their children (NIDA Research Monograph Number 166, pp. 68-86). Rockville, MD: National Institute on Drug Abuse.

This chapter reviews a range of subject recruitment and retention issues specific to pregnant women and women of childbearing age who use illicit substances. Overall, recruiting and retaining study participants in the drug treatment field pose difficult issues. The most frequently identified problems relate to the difficulty of adhering to a strict randomized trial design and to high attrition among study participants. When subjects are substance-abusing women with children, these same problems commonly arise, but they are often made more complex because they occur in combination with a variety of other unique issues that relate specifically to this

population. To help researchers and clinicians develop strategies for decreasing noncompliance and attrition, this chapter provides examples of how the lifestyle and needs of addicted women with children affect recruitment and retention in treatment research.

Hughes, P.H., Coletti, S.D., Neri, R.L., Urmann, C.F., Stahl, S., Sicilian, D.M., & Anthony, J.C. (1995). Retaining cocaine-abusing women in a therapeutic community: The effect of a child live-in program. *American Journal of Public Health*, *85*, 1149-1152.

A clinical trial examined whether retention of cocaine-abusing women in a therapeutic community can be improved by allowing children to live with them during treatment. Fifty-three women were randomly assigned to either the standard community condition, in which children were placed with the best available caretaker, or the demonstration condition, in which one or two of the children lived with their mother in the community. Survival analysis distributions indicated that demonstration women remained in treatment significantly longer than standard treatment women. Mean length of stay was 300 days versus 102 days, respectively.

Lanehart, R., Clark, H., Rollings, J., Haradon, D., & Scrivner, L. (1996). Impact of intensive case-managed intervention on substance-using pregnant postpartum women. *Journal of Substance Abuse*, *8*, 487-495.

This study examines the impact of the Women's Intervention Services and Education (WISE) Project in serving substance-using pregnant and postpartum women through an array of case-managed services and supports. A descriptive analysis of multiple outcome indicators was performed on 152 women who had a minimum 6 months of exposure to WISE services at the time of the analysis. The variables used in the analysis to assess client and program outcomes included substance use, employment, arrests, incarceration, birth weight, and social support. This group of women showed statistically significant improvements across each of these multiple outcome indicators from pre-WISE to WISE discharge. Although the findings of this study are not conclusive because no control group was employed, the results are encouraging and supportive of a growing body of literature that suggests that pregnant and postpartum polydrug-using women can be responsive to case-managed, intensive intervention with aftercare support.

Lewis, B.F., & Ross, R. (1994). Retention in therapeutic communities: Challenges for the nineties. In F.M. Tims, G. De Leon, & N. Jainchill (Eds.), *Therapeutic community: Advances in research and application* (NIDA Research Monograph Number 144, pp. 99-116). Rockville, MD: National Institute on Drug Abuse.

A majority of research studies have concluded that a positive relationship exists between length of stay and successful outcome. The longer an individual stays in the therapeutic community, the greater the likelihood that elimination or substantial reduction of drug-related behaviors will be

achieved and sustained. This chapter examines what is known about the retention phenomenon and makes a case for a greater understanding of its workings, manifestations, and implications.

Lewis, R.A., Haller, D.L., Branch, D., & Ingersoll, K.S. (1996). Retention issues involving drug-abusing women in treatment research. In E.R. Rahdert (Ed.), Treatment for drug exposed women and their children (NIDA Research Monograph Number 166, pp. 110-122). Rockville, MD: National Institute on Drug Abuse.

While drug treatment has been available to women, it has rarely been based on women's special needs. Not only are women an underserved population, but they also experience greater problems with retention once they begin treatment. This chapter discusses economic barriers, logistical barriers to retention (including child care and transportation), and other barriers to treatment. This chapter also discusses patient barriers and program barriers to retention. The chapter concludes with staff suggestions and recommendations for programs.

Markoff, L.S., & Cawley, P.A. (1996). Retaining your clients and your sanity: Using a relational model of multi-systems case management. Journal of Chemical Dependency Treatment, 6, 45-65.

Addressing women's special needs in substance abuse treatment might increase the retention of women clients. This article reviews the theoretical and empirical support for the use of two particular strategies, an emphasis on relationship and an empowerment approach. One particular program, Project Second Beginning, which utilizes a relational model of multi-systems case management to address women's special needs, is described in detail. This program has had an unusually high retention rate. Case illustrations are used to illustrate the implementation of the model.

Palinkas, L.A., Atkins, C.J., Noel, P., & Miller, C. (1996). Recruitment and retention of adolescent women in drug treatment research. In E.R. Rahdert (Ed.), Treatment for drug exposed women and their children (NIDA Research Monograph 166, pp. 87-109). Rockville, MD: National Institute on Drug Abuse.

The issues of recruitment and retention of adolescents in drug treatment studies are examined, with a particular emphasis on the experience of one of the Perinatal-20 studies that deals exclusively with adolescent women between the ages of 14 and 19. A greater understanding of the factors that promote recruitment and retention of adolescents in drug treatment programs in general and drug treatment research in particular is critical to the success of these programs. Both client and program characteristics appear to exert considerable influence on the ability of programs to successfully recruit and retain adolescent clients. With respect to the program, inclusion and exclusion criteria based on experimental design, treatment approach, and practicalities of implementation might be responsible for the exclusion of a substantial percentage

of potential clients. With respect to the client, factors such as ethnicity appear to influence recruitment of adolescents in drug treatment. Factors such as severity of drug use, pregnancy or parenting status, presence of psychiatric comorbidity, delinquent behavior, sexual activity, and internal locus of control appear to decrease the likelihood of retaining adolescents in drug treatment. Factors such as age and school dropout status influence the likelihood of successful recruitment and retention. Most important, drug treatment programs for adolescents can improve both recruitment and retention efforts by making greater use of adolescent social support networks.

Pivnick, A. (1996). Kinchart-sociograms as a method for describing the social networks of drug-using women. In E.R. Rahdert (Ed.), Treatment for drug-exposed women and their children (NIDA Research Monograph No. 166, pp. 163-182). Rockville, MD: National Institute on Drug Abuse.

The kinchart-sociogram method elicits detailed information about subjects' framework of personal support and other systems, including information vital to assessing social support for HIV illness, the frequency of drug use among family members and friends, and sexual contact patterns relevant to HIV transmission risk. The object is to define these networks in terms of concrete social relations located in specific sites; however, the identification of an individual's personal social relationships does not necessarily imply interactions between constituent members as in traditional social network analysis. The method permits a graphic and quantifiable description of complex social realities. By repeating the charting at regular intervals, the method permits prospective study of changes in social networks associated with changes in drug use patterns and, in the case of HIV infection, disease progression. Kinchart-sociograms can elicit data that demonstrate the social nature of drug use and its expression in influential social contexts such as families, sexual relations, and households. In turn, the description of these social contexts suggests the development of treatment modalities that include sexual partners, children, and household members. (Author abstract modified)

Roberts, A.C. (1996). Predicting treatment retention of women dependent on cocaine. American Journal of Drug and Alcohol Abuse, 22, 313-333.

The purpose of this research was to assess differences in retention patterns and discharge status across three program settings and to examine selected pretreatment characteristics that might help predict treatment retention, which was operationalized as length of time in treatment. Three groups of pretreatment characteristics were examined; they included demographic factors, drug use and treatment history, and psychological status and symptomology. Clients in the intensive day treatment program tended to stay longer and were more likely to successfully complete the program than clients in either the outpatient or the traditional residential programs. In general, pretreatment client characteristics were not helpful in predicting length of time in treatment regardless of program type. Few pretreatment characteristics were related to retention within

programs, and significant predictors differed across treatment settings. (Author abstract modified)

Stevens, S.J., & Arbiter, N. (1995). A therapeutic community for substance-abusing pregnant women and women with children: Process and outcome. Journal of Psychoactive Drugs, *27*, 49-56.

The fact that women of childbearing age make up a large proportion of the alcohol- and other drug-using population has gained national attention. Since treatment for addicted pregnant women and women with children has become a Federal priority, treatment programs of various modalities have opened their doors to this population. One promising treatment modality is the therapeutic community (TC). This article briefly describes Amity, a TC for women and children that provides long-term residential treatment for addicted pregnant women and women with children. Amity currently has 65 women and 50 children living together in treatment. Descriptive data, including demographic information and data on violence, are presented. Preliminary outcome data are detailed, comparing drop out and treatment completion on such variables as alcohol and other drug use, re-arrest, employment, child custody, and involvement in support groups. A pattern of behavior involving experiences in violent episodes and alcohol and other drug use is illuminated and discussed. Ideas for further research are suggested.

Strantz, I., & Welch, S. (1995). Postpartum women in outpatient drug abuse treatment: Correlates of retention/completion. Journal of Psychoactive Drugs, *27*, 357-373.

This article examines correlates of retention/completion for low-income court-ordered and voluntary postpartum women in two types of outpatient drug abuse treatment: day treatment (an intensive 7-days-a-week, neurobehavioral treatment model program) and traditional outpatient treatment (a conventional 5-days-a-week program). Instruments used in this study to assess factors in retention/completion include the Addiction Severity Index, the Brief Symptom Inventory, the Beck Depression Inventory, the Hudson's Index of Self-Esteem, the Coping Strategies Inventory, the Social Support Questionnaire, and a Barriers to Treatment measure specifically designed for this study. It was found that the women in this study had relatively normal psychosocial profiles, and that their support systems, while small, were relatively satisfying. Very few psychosocial profile elements were found to be predictors, but social support was marginally related to length of stay in treatment. Program type, infant custody, and number of children in the home appeared to be the strongest predictors of treatment retention/completion.

Sullivan, W.P. (1994). Case management and community-based treatment of women with substance abuse problems. Journal of Case Management, *3*, 158-161, 183.

Although there has been increased sensitivity to the needs and issues that face women with substance abuse problems, they continue to be an understudied and underserved population. To

effectively address the needs of women, special efforts must be made to attract women into treatment settings and retain them. Furthermore, treatment programs must address the unique needs of women and provide a holistic range of services to adequately serve them. This article argues that strengths-based case management, provided in unison with comprehensive community-based programs, shows promise as an effective strategy to address the needs of women in alcohol and drug treatment.

Szuster, R.R., Rich, L.L., Chung, A. & Bixconer, S.W. (1996). Treatment retention in women's residential chemical dependency treatment: Effect of admission with children. Substance Use and Misuse, 31, 1001-1013.

In the U.S., there has been an increased interest in the development of treatment programs that admit chemically dependent women with their children. The Salvation Army Family Treatment Services in Honolulu has had a long history of admitting women both with and without their children to long-term residential treatment. This has provided an opportunity to study the differences in treatment retention between these two groups. Subjects were 130 females who participated in treatment; analyses determined whether there were different outcomes for women with children in treatment and women without children in treatment, with regard to type of discharge and length of time in treatment. Results clearly indicated better retention rates for women who participated in treatment with their children.

Wald, R., Harvey, S.M., Hibbard, J. (1995). A treatment model for women substance users. International Journal of the Addictions, 30, 881-888.

This paper discusses a multifaceted program that consists of women-centered drug counseling plus ancillary services based on the five basic steps of Freire's empowerment theory. The program is designed to increase self-awareness, skills, and knowledge acquisition; to reduce feelings of isolation by broadening interpersonal networks, including activities to enhance assertiveness and communication skills; and to provide parenting education to counteract inappropriate mother-child interaction as well as to positively influence role modeling. Both transportation and child care are recommended ancillary services.

Weissman, G., Melchior, L., Heba, G., Smereck, G., et al. (1995). Women living with drug abuse and HIV disease: Drug abuse treatment access and secondary prevention issues. Journal of Psychoactive Drugs, 27, 401-411.

In collaboration with the National Institute on Drug Abuse, the Health Resources and Services Administration is conducting a multisite, longitudinal study on issues of service needs, service utilization, and access to care for drug abusers with HIV. This article discusses access to drug abuse treatment and HIV secondary prevention for 116 women interviewed during the study's first year in five US cities. Using interview data from 115 service providers in those same cities, it

also discusses drug abuse treatment availability and barriers to service expansion for drug users with HIV. Study findings indicate that there are highly significant gaps between the drug abuse treatment services these women feel they need and those they have been able to receive; it was particularly pronounced for drug detoxification and residential and outpatient drug-free treatment. Women who used crack cocaine or injection drugs had high levels of need for residential and outpatient drug abuse treatment, while women who used crack were found to have significantly less experience with the drug abuse treatment system than IDUs. HIV secondary prevention was also found to be a critical need for these women, many of whom were engaging in behaviors that place them at risk for reinfection, infection with other diseases, and transmission to others. Providers indicated that lack of funding was the major barrier to expanding services for this population; other barriers, such as lack of ancillary services and transportation, were also noted. Two positive findings were that many drug abuse treatment agencies in these cities provide a wide range of ancillary services and that many different kinds of agencies offer drug abuse treatment services. (Author abstract modified)

III. IMPROVEMENT OF CHILD HEALTH AND WELFARE

III. IMPROVEMENT OF CHILD HEALTH AND WELFARE

Barth, R.P. (1994). Shared family care: Child protection and family preservation. Social Work, 39(5), 515-524.

This article discusses shared family care and the involvement of the planned provision of out-of-home care to parents and children so that the parent and host caregivers simultaneously care for the child and work toward independent in-home care by the parents. Characteristics of five types of shared family care arrangements are described: residential programs for children that also offer residence and treatment for their parents; drug and alcohol treatment programs for adults that also offer treatment for children; drug treatment programs for mothers and children; residential programs for pregnant and parenting mothers; and foster family homes that offer care of parent and child. Opportunities for development of more shared family care arrangements are presented. (Author abstract modified)

Beckwith, L. (1996). Measurement of the early rearing environment: Caregiver-child interaction. In E.R. Rahdert (Ed.), Treatment of drug exposed women and their children (NIDA Research Monograph Number 166, pp. 205-224). Rockville, MD: National Institute on Drug Abuse.

This chapter identifies measures that can be used to capture status and change in the quality and quantity of early caregiver-child interactions. Because maternal drug abuse often necessitates the use of alternative arrangements, the measures discussed here are suitable for biological parents, grandparents, professional foster parents, or other designated caregivers. The discussion considers the significance of such measures in evaluating the efficacy of maternal intervention programs and in understanding the sequelae of prenatal drug exposure for children. The chapter also reviews the conceptual dimensions of caregiving, assessment procedures used in the home and the laboratory, and level of analysis, whether by behavioral counts or rating scales. Comments on the strengths and weaknesses are also provided.

Camp, J.M., & Finkelstein, N. (1995). Fostering effective parenting skills and healthy child development within residential substance abuse treatment settings. Cambridge, MA: Coalition on Addiction, Pregnancy, and Parenting.

This report presents the findings on the effects of parent training programs in two Massachusetts urban residential treatment centers for substance-abusing pregnant women. The programs included training and multiple services for the women and their infants while they were in treatment and after their discharge from the program. The report describes the women, changes in their parenting skills and self-esteem, their assessment of the program, the infant's development, follow-up data on a sample of the women, factors that predict program retention, and implications of the findings.

Metsch, L.R., Rivers, J.E., Miller, M., Bohs, R., et al. (1995). Implementation of a family-centered treatment program for substance-abusing women and their children: Barriers and resolutions. Journal of Psychoactive Drugs, 27, 73-83.

Recent Federal health financing and health care delivery programs have increased access to alcohol and other drug abuse treatment programs for low-income women, and have provided intervention and prevention services for their children and families. The Village South Families in Transition project in Miami implemented a residential treatment program for women and their children that aimed to decrease alcohol and other drug use, reduce reliance on social and health welfare systems, improve functioning in specific life-skill and vocational areas, improve parenting techniques and maternal/child relations, and provide intervention and prevention services for the clients' children in a safe and supportive environment. Program implementation required resolutions to numerous barriers, including securing a facility for women and children; recruiting, hiring, and training of staff; establishing and maintaining community linkages; treatment consideration; balancing treatment versus evaluation/research; and critical decisions faced by treatment staff as they modify client-centered programs to incorporate gender-specific and family-centered programs.

**IV. ISSUES IN SUBSTANCE ABUSE TREATMENT FOR PREGNANT AND
POSTPARTUM WOMEN AND THEIR CHILDREN**

IV. ISSUES IN SUBSTANCE ABUSE TREATMENT FOR PREGNANT AND POSTPARTUM WOMEN AND THEIR CHILDREN

Bell, K., Cramer-Benjamin, D., & Anastas, J. (1997). Predicting length of stay of substance-using pregnant and postpartum women in day treatment. Journal of Substance Abuse Treatment, 14, 393-400.

Pregnant and postpartum substance-using women are a special population whose needs do not reflect those of the general substance-using communities. This study examined length of stay in a federally funded day treatment demonstration program in order to identify predictor variables that may help identify pregnant and postpartum substance-using women at high risk for dropping out of treatment. Variables from intake and exit questionnaires on a sample of 163 women were analyzed using multiple regression on both days in treatment and the logarithmic transformation of days in treatment. Few predictor variables were identified, although findings suggest that if a woman is younger and self-referred, she may leave treatment earlier. As one of the first sets of published data on pregnant and postpartum women and retention in treatment, this study lays the groundwork for future research on the retention of pregnant and postpartum women in treatment, thereby facilitating the success of these women in overcoming their addiction.

Burkett, G., Gomez-Marin, O., Yasin, S.Y., & Martinez, M. (1998). Prenatal care in cocaine-exposed pregnancies. American Journal of Obstetrics and Gynecology, 92, 193-200.

The effect of prenatal care with and without drug rehabilitation on perinatal outcome in cocaine-using women was examined. Cocaine-exposed pregnancies of 905 human immunodeficiency virus (HIV)-negative women were frequency matched (ratio 6:1) and compared with 150 nonusers. Cocaine subgroups consisted of 278 women who received prenatal care and drug rehabilitation ("comprehensive care"), 206 women who received prenatal care only, and 421 who received neither. Maternal and fetal complications, drug screening, and attendance were recorded. Pregnancy rates and HIV seroconversion were determined over the year following delivery. The results indicated the groups were similar in age, race, education and poverty level. Linear trends of increasing incidence of maternal complications were seen across the four groups. Comparing nonusers with cocaine users, the odds ratios, with 95 percent confidence intervals were: 28.0 (4.2, 103.2) for both anemia and weight under 100 lb; 2.4 (1.8, 5.0) for urinary tract infections; 15 (4.6, 36.1) for syphilis; and 11.2 (4.0, 35.8) for other sexually transmitted diseases. Perinatal outcome measures were similar for nonusers and "comprehensive care" groups but significantly worse for the other two groups. Four maternal deaths and two myocardial infarctions occurred with no care. Positive toxicology at delivery was 1.5 and 4.3 times more likely for the two groups without drug treatment than for "comprehensive care." Congenital anomalies and HIV seroconversion increased in cocaine users. Repeat pregnancy was less likely and more often drug-free with "comprehensive care." The authors concluded that "Comprehensive care" of the cocaine-using gravida increases the likelihood of carrying to term,

having fewer complications, being drug-free at delivery, and having fewer exposed repeat pregnancies. (Author abstract modified).

Camp, J.M., & Finkelstein, N. (1997). Parenting training for women in residential substance abuse treatment: Results of a demonstration project. Journal of Substance Abuse Treatment, 14, 411-422.

This paper presents findings on the impact of implementing a parenting component in two urban residential treatment programs in Massachusetts for pregnant and parenting chemically dependent women. The parenting component consisted of multiple services for both women and their infants while they were in residential treatment as well as aftercare services after discharge from treatment. Findings presented focus on: the characteristics of the 170 pregnant and parenting women who participated in the parenting component during its 48 months of implementation; changes in the parenting skills and self-esteem of women who completed parenting training; the quality of mother-child interaction; and the participants' perceptions about the impact of the parenting training. Women in both programs made dramatic improvements in self-esteem and experienced significant gains in parenting knowledge and attitudes. The participants were also overwhelmingly positive about the impact of the parenting training on their lives. Study findings underline the importance of parenting services for pregnant and parenting women in residential substance abuse treatment.

Daley, M., Argeriou, M., & McCarty, D. (1998). Substance abuse treatment for pregnant women: A window of opportunity? Addictive Behaviors: An International Journal, 23, 239-249.

The use of substance abuse treatment services by pregnant and nonpregnant women was compared to explore the effects of pregnancy on treatment utilization and outcomes. Treatment service records for 227 pregnant drug- and alcohol-dependent women and a matched comparison group of 277 nonpregnant women were retrieved from the Massachusetts Bureau of Substance Abuse Services Management Information System. Treatment services received by the two groups of women during a 6-month period following an index detoxification were tabulated and compared. Treatment services for pregnant women differed quantitatively and qualitatively from the services received by nonpregnant women over the 6-month time period. After controlling for background characteristics and substance abuse history, pregnant women were two times more likely to be readmitted to detoxification, three times more likely to enter residential facilities, and five times more likely to enter methadone programs. For both groups, the use of outpatient and/or residential treatment services following discharge from detoxification significantly reduced the risk of subsequent detoxification admissions. The increased likelihood of admission to detoxification, residential, and methadone services suggests that treatment programs have improved access to care for pregnant women. Multiple detoxification admissions suggest, however, that some pregnant women have difficulty entering stable recovery. Given the brevity of the gestational period and the detrimental effects of drug and alcohol use on fetal outcomes,

the use of continuing treatment services for pregnant women is strongly recommended. (Author abstract modified)

Elk, R., Mangus, L., Rhoades, H., Andres, R., & Grabowski, J. (1998). Cessation of cocaine use during pregnancy: Effects of contingency management interventions on maintaining abstinence and complying with prenatal care. Addictive Behaviors: An International Journal, 23, 57-64.

Previous studies have reported cessation of cocaine use in pregnant women prior to treatment entry. This study examined the relative effectiveness of adjunctive contingency management interventions in maintaining abstinence and enhancing compliance with prenatal care in this unique population. Pregnant cocaine-dependent women who had used the drug during pregnancy but had ceased use prior to study entry (N=12) were randomly assigned to one of two treatment groups. All patients received a multifaceted treatment including behaviorally based drug counseling and weekly prenatal visits. Patients in the experimental condition also received contingent reinforcement for cocaine abstinence and attendance at prenatal visits. There was a high rate of retention and abstinence from cocaine in both groups. However, patients in the experimental group had a higher rate of attendance at prenatal visits, and none of the patients in this group experienced adverse perinatal outcomes, compared to 80 percent of patients in the control group. This finding has important implications for cost-effective treatments and prevention of illness.

Field, T.M., Scafidi, F., Pickens, J., Prodromidis, M., Pelaez-Nogueras, M., Torquati, J., Wilcox, H., Malphurs, J., Schanberg, S., & Kuhn, C. (1998). Polydrug-using adolescent mothers and their infants receiving early intervention. Adolescence, 33(129), 117-143.

This study investigated the effects of an intervention for polydrug-using adolescent mothers. The program included educational, vocational, and parenting classes; social and drug rehab; and day care for their infants while they attended school half-day. The drug-exposed infants were similar to the nonexposed infants on traditional birth measures, although they had inferior Brazelton Neonatal Behavioral Assessment Scale scores, including habituation, orientation, abnormal reflexes, general irritability, and regulatory capacity. The drug-exposed infants also spent less time in quiet sleep and more time crying and showing stress behaviors. Both the mothers and the infants in the drug groups demonstrated inferior interactions, and their dopamine and serotonin levels were significantly higher. As early as 3 months (following 3 months of intervention), the drug rehab mothers and their infants looked more like the nondrug group in their interactions; by 6 months, they looked similar on virtually every measure. At 12 months, the infants of drug rehab mothers (versus the drug control group) had superior Early Social Communication Scale scores and Bayley Mental scale scores, as well as significantly greater head circumference and fewer pediatric complications. The drug rehab mothers also improved on several lifestyle variables. They demonstrated a lower incidence of continued drug use and repeat pregnancy, and a greater number continued school, received a high school or general equivalency diploma, or were placed

in a job. Thus, a relatively cost-effective high school-based intervention had positive effects on both adolescent mothers who had used drugs and their infants.

Goldman-Fraser, J. (1998). Cognitive influences on mother-infant interaction: A focus on substance-dependent women in treatment during pregnancy and postpartum. Dissertation Abstracts International, 58(12), 6844-B.

This study examined cognitive factors associated with optimal parenting: knowledge about child development, sense of parenting competence, and positive perceptions of infant behavior. These cognitions are examined in 21 substance-dependent pregnant women and compared to a matched group of 27 substance-free mothers. The relationship between these parenting cognitions and mother-child interactions were examined 3 to 4 months postpartum through interviews measuring psychosocial variables (i.e., life stressors, depression) as well as parenting cognitions. Mother-infant interaction was videotaped at postpartum and coded for maternal and infant emotional availability. Results indicated minimal differences between the substance-dependent and comparison mothers in terms of their parenting cognitions and no association between parenting cognitions and mothers' emotional availability. Both reported accurate knowledge of infant development, high levels of parenting confidence, and generally positive perceptions of their infant's behavior. Regarding the mothers' emotional availability during mother-infant interactions, both groups scored below optimal in terms of sensitivity. However, when compared with substance-free women, trends merged that suggest the substance-dependent mothers were at risk for being less sensitive, providing inappropriate developmental support, and manifesting subtle hostile behaviors when interacting with their infants. Findings also suggest that the severity of the mother's substance abuse, stress and health problems contributes to the quality of both parenting cognitions and mother-infant interaction. Suggestions for future research and shaping intervention programs that build on strengths and areas of concern relative to parenting cognitions are discussed.

Hall, M.F. (1998). Correlates of change in day treatment with low-income pregnant and postpartum women substance abusers. Dissertation Abstracts International, 59(1), 323-A.

This study examined the process of change toward achieving abstinence in a sample of low income, pregnant and postpartum substance-abusing women participating in a federally funded day treatment demonstration project. The sample included African-American, Hispanic, and white participants. The study's design employed both primary and secondary data sources and multivariate statistical procedures. The relationship between three of the dimensions most frequently mentioned in the literature as significant in predicting positive change toward overcoming addictive behaviors was explored: demographic factors, personal characteristics, and social support. The transtheoretical model for changing problem behaviors developed by James Prochaska and his colleagues and length of stay in the program were explored as both predictors and measures of change. Clinicians and case managers were trained and used as informed raters to assign participants to the Prochaska model stages. This model conceives modification of

addictive behavior as progressing through five stages in which the substance abuse progresses from not perceiving abuse as a problem to exerting considerable effort to maintain abstinence. Demographic factors were significant in predicting who became engaged in treatment, but education and length of stay in treatment were the best predictors of growth in treatment. This finding has implications for community outreach and program planning. Results demonstrated the utility of more statistically complex multivariate research to help close the gap between research and clinical practice experience. The Transtheoretical Model of Change was highly recommended as both a training and research tool and considered particularly useful when both goals are simultaneously being pursued.

Laudet, A., Magura, S., & Whitney, S. (1998). Effectiveness of intensive services for substance-using women with cocaine-exposed infants. In Problems of Drug Dependence, 1997: Proceedings of the 59th Annual Scientific Meeting (NIDA Research Monograph No. 178, p. 126) Washington, DC: Government Printing Office.

Since substance abuse is making new and growing demands on the child welfare system, New York's Family Rehabilitation Program is aimed at addressing substance abuse in the context of clients' family needs; this is a multi-site, comprehensive services program for families with cocaine-exposed infants. Preliminary outcome data from an ongoing evaluation based on 73 percent of the 253 clients enrolled at baseline indicate that at 12-month post-admission follow-up, 40 percent of clients are still enrolled in the program; 10 months is the median enrollment length. While 78 percent of clients report no cocaine/crack cocaine use in the past month, 36 percent tested negative for cocaine by hair analysis (indicating the past month of use). Overall, retention time in New York's Family Rehabilitation Program appears excellent compared with traditional outpatient drug treatment or abstinence—between 36 percent and 40 percent of all clients at 1-year follow-up. Clients either completing or still enrolled in New York's Family Rehabilitation Program displayed significantly lower levels of cocaine/crack cocaine use than dropouts at 1-year follow-up, as measured by quantitative hair levels in a multivariate analysis. Employment and participation in school/training increased, and probation/parole status decreased, between baseline and follow-up for the sample as a whole.

Pettinati, H.M., Volpicelli, J.R., Filing, J.I., Markman, I., Luck, G.J., et al. (1998). Predicting treatment noncompliance in cocaine dependent mothers. In Problems of Drug Dependence, 1997: Proceedings of the 59th Annual Scientific Meeting (NIDA Research Monograph No. 178, p. 340). Washington, DC: Government Printing Office.

A study was conducted to identify pre-treatment characteristics that predicted treatment noncompliance in the first 6 weeks of addiction treatment for 84 crack-cocaine-dependent mothers, aged 18 or older, who were either pregnant or had at least one child younger than 4 years old. Noncompliance was defined as failing to attend any treatment for 2 or more weeks during the first 6 weeks. Results revealed that the number of high-risk sexual behaviors these women had engaged in during the 6 months prior to entering treatment was the best predictor of

treatment noncompliance in the first 6 weeks of treatment. The second predictor of treatment attrition was the number of days of reported cocaine use in the 30 days prior to entering treatment. Women with both cocaine and significant alcohol use were more likely to drop out of treatment; however, there was a significant correlation between the number of days of cocaine use with the number of days of alcohol use in the 30 days prior to treatment.

Stichler, J.F., Weiss, M., & Wight, N.E. (1998). Examining the “cost” of substance abuse in pregnancy: Patient outcomes and resource utilization. Journal of Perinatology, 18, 384-388.

This study investigated the clinical and financial impact of self-reported maternal drug history and documented intrauterine substance exposure on maternal-neonatal morbidity and hospital costs. This two-part, case-controlled, retrospective study used matching control groups. The results indicated that among women reporting a history of substance abuse during or prior to the index pregnancy, maternal hospital costs were significantly higher and more variable; birth weight, length, and gestational age were lower; no significant differences were noted in the number of maternal risk factors or neonatal complications and hospital costs. In comparison of neonates with positive toxicology screens and a matched control group, there were no differences in neonatal outcomes or costs, but the number of complicating maternal risk factors and maternal hospital costs were significantly different. The authors concluded that knowledge of maternal substance abuse history may be useful in planning for maternal-neonatal care needs and reimbursement for hospital care for this at-risk patient population. (Author abstract modified)

Strantz, I.H., & Welch, S.P. (1995). Postpartum women in outpatient drug abuse treatment: Correlates of retention/completion. Journal of Psychoactive Drugs, 27, 357-373.

This article examines correlates of retention/completion for low-income court-ordered and voluntary postpartum women in two types of outpatient drug abuse treatment: day treatment (an intensive 7-days-a-week, neurobehavioral treatment model program) and traditional outpatient treatment (a conventional 5-days-a-week program). Instruments used in this study to assess factors in retention/completion include the Addiction Severity Index, the Brief Symptom Inventory, the Beck Depression Inventory, the Hudson’s Index of Self-Esteem, the Coping Strategies Inventory, the Social Support Questionnaire, and a Barriers to Treatment measure specifically designed for this study. It was found that the women in this study had relatively normal psychosocial profiles, and that their support systems, while small, were relatively satisfying. Very few psychosocial profile elements were found to be predictors, but social support was marginally related to length of stay in treatment. Program type, infant custody, and number of children in the home appeared to be the strongest predictors of treatment retention/completion.

Thompson, M.P., & Kingree, J.B. (1998). Frequency and impact of violent trauma among pregnant substance abusers. *Addictive Behaviors: An International Journal*, 23, 257-262.

This research was conducted with 96 low-income pregnant women who enrolled in a residential substance abuse treatment program. The study had three goals: to document the prevalence of exposure to violent trauma, to examine the prevalence of posttraumatic stress symptomatology, and to assess if trauma exposure and posttraumatic stress were related to program completion. Results indicated that the sample had high rates of exposure to violent trauma, as 72 percent had experienced sexual assault, 67 percent had experienced physical assault, and 68 percent had experienced indirect violent trauma. High rates of traumatic stress were found in that 62 percent displayed symptoms consistent with posttraumatic stress disorder. Finally, logistic regression analyses revealed that traumatic stress, but not trauma exposure, was related to program completion. Findings suggest that treatment providers need to assess trauma histories and traumatic stress symptoms.

CITATIONS ONLY

Duncan, D.F. (1998). Prevention issues: Some cautionary notes. In R.L. Hampton, V. Senatore, & T.P. Gullotta (Eds.), Substance abuse, family violence, and child welfare: Bridging perspectives (pp. 249-262). Thousand Oaks, CA: SAGE Publications.

Haller, D.L., Knisely, J.S., Elswick, R.K., Dawson, K.S., & Schnoll, S.H. (1997). Perinatal substance abusers: Factors influencing treatment retention. Journal of Substance Abuse Treatment, 14, 513-519.

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