September 1993

Childhood Risk Factors in Dually Diagnosed Homeless Adults

Laura E. Blankertz
Matrix Research Institute

Ram A. Cnaan
University of Pennsylvania, cnaan@sp2.upenn.edu

Erica Freedman
University of Pennsylvania

Reprinted from *Social Work*, Volume 38, Issue 5, 1993, pages 587-596.

Childhood Risk Factors in Dually Diagnosed Homeless Adults

Abstract
Although the negative long term effects of specific childhood risk factors - sexual and physical abuse, parental mental illness and substance abuse, and out of home placement - have been recognized, most studies have focused on just one of these risks. This article examines the prevalence of these five childhood risk factors among dually diagnosed (mental illness and substance abusing) homeless adults in rehabilitation programs. It further assesses the impact of each risk factor individually and in combinations of two on the social functioning skills and rehabilitation progress of these multiply disadvantaged clients.

Keywords
child maltreatment, dual diagnosis, homelessness, mental illness, rehabilitation

Comments
Reprinted from *Social Work*, Volume 38, Issue 5, 1993, pages 587-596.

10

Childhood Risk Factors in Dually Diagnosed Homeless Adults

Laura E. Blankertz, Ram A. Cnaan, and Erica Freedman

Although the negative long-term effects of specific childhood risk factors—sexual and physical abuse, parental mental illness and substance abuse, and out-of-home placement—have been recognized, most studies have focused on just one of these risks. This article examines the prevalence of these five childhood risk factors among dually diagnosed (mentally ill and substance abusing) homeless adults in rehabilitation programs. It further assesses the impact of each risk factor individually and in combinations of two on the social functioning skills and rehabilitation progress of these multiply disadvantaged clients.

Key Words: *child maltreatment; dual diagnosis; homelessness; mental illness; rehabilitation*

During the past decade, much publicity and social action have been directed toward the maltreatment of young people in general and toward the physical and sexual abuse of children in particular. However, the term *childhood maltreatment* is difficult to measure (Hutchinson, 1990). Some key risk factors that may improperly affect childhood development are sexual and physical abuse, parental substance abuse or mental illness, and out-of-home placement. Whereas the first two factors are clear examples of child abuse, parental substance abuse and parental mental illness are often documented causes of child neglect and abuse. Out-of-home placement may in fact be a cumulative indication of parental neglect and abuse.

The literature on the impact of dysfunctional family background on adult life patterns is just emerging. Many studies focus on just one risk factor and ignore the interactive effects of others. This article examines the close association of several childhood risk factors for a group of dually diagnosed homeless individuals (that is, those with co-occurring severe mental illness and substance abuse problems). More specifically, it focuses on the effects of single and multiple forms of childhood maltreatment on the social functioning skills and progress of these multiply disabled individuals in the rehabilitation process.

Literature Review

Childhood Sexual Abuse

Sexual abuse in childhood has a severe negative impact on childhood development and behavior and a lasting effect on adult behavior (Kempe & Kempe, 1984; Wyatt & Powell, 1988). As adolescents and adults, victims of childhood sexual assault exhibit poor impulse control, depression, low self-esteem, hopelessness, and anxiety, any of which can lead to substance abuse, mental illness, and suicide attempts (Bassuk, 1984; Crewdson, 1988; Finkelhor, 1988). Conte and Schuerman (1987) found that victims were more affected by abuse if their families had other problems such as unemployment, substance abuse, and lack of overall support.

Studies of individuals with mental illness have found higher rates of childhood sexual abuse than those found in samples from the general population (Jacobson & Richardson, 1987; Surrey, Suett,

CCC Code: 0037-8046/93 $3.00

Michaels, & Levine, 1990). Some studies found that as psychiatric patients, individuals who have experienced childhood sexual abuse tend to have more severe psychiatric symptoms than nonabused patients (Bryer, Nelson, Miller, & Drol, 1987; Rose, Peabody, & Stratigeas, 1991; Surrey et al., 1990). Abused patients also may demonstrate more difficulty in forming therapeutic alliances (Jacobson & Richardson, 1987). Rates of childhood sexual abuse for psychiatric inpatients ranged between 19 percent (Jacobson & Richardson, 1987) and 29 percent (Bryer et al., 1987), whereas an outpatient study found the rate to be 16 percent (Surrey et al., 1990).

Childhood Physical Abuse

Children who are physically abused must reinterpret their worldview to incorporate the abuse (Rieker & Carmen, 1986). This reinterpretation, especially when the abuse is ongoing, when it is unrecognized by others, and when the child is given no support, may lead to long-term loss of self-esteem, fragmented identity, and inability to form trusting relationships (Jacobson & Richardson, 1987; Rieker & Carmen, 1986). Childhood physical abuse is likely to be precipitated by parental alcoholism (Rose et al., 1991), drug abuse, personality disorders, low socioeconomic status, single parenthood, isolation, and personal history of maltreatment (Rieker & Carmen, 1986). Incidents of childhood physical abuse among psychiatric inpatients ranged from 38 percent (Bryer et al., 1987) to 49 percent (Jacobson & Richardson, 1987). Outpatient rates as high as 21 percent have been cited (Surrey et al., 1990). Obviously, figures vary according to methodology, definition of abuse, and sample.

Although many studies combine physical and sexual abuse when looking at the retrospective impact on adults, there is evidence that physical abuse may produce its own pattern of behavior and psychiatric symptoms (Bryer et al., 1987; Surrey et al., 1990). Carmen, Rieker, and Mills (1984) found that psychiatric inpatients who had been physically abused only were not as aggressive and did not have as long a hospital stay as those who were sexually abused.

Many individuals, however, have been both sexually and physically abused. Figures for childhood physical assault, sexual assault, or both range from 23 percent to 57 percent among psychiatric inpatient clients. There is strong evidence that individuals who have been both physically and sexually abused are more likely to suffer as adults from severe coping problems and are more likely to demonstrate severe psychiatric symptoms and other destructive behaviors as compared with nonabused individuals (Bryer et al., 1987; Carmen et al., 1984; Jacobson & Richardson, 1987; Rose et al., 1991; Surrey et al., 1990).

There is strong evidence that individuals who have been both physically and sexually abused are more likely to suffer as adults from severe coping problems.

Parental Mental Illness

Children of parents who are mentally ill are at much greater risk of developing mental illness (Feldman, Stiffman, & Jung, 1987; Rutter & Quinton, 1984; Silverman, 1989). The type of disorder (if any) a child of a mentally ill parent will develop over time cannot be predicted with any accuracy (Rutter, 1980). Rutter and Quinton (1984) contended that mental illness in offspring results from a combination of genetic, psychosocial, and environmental factors. However, the exact mode of interaction between these factors cannot be defined (Kendler & Eaves, 1986). A child's risk of developing a mental illness in adulthood increases in proportion to his or her exposure to mentally ill significant others (for example, parents and siblings) (Erlenmeyer-Kimling, 1977; Gammon, 1983). Such risk is also affected by the chronicity and severity of parental mental illness (Feldman et al., 1987), the amount of marital discord of the parents (Rutter, 1980), the modes of social interaction between parent and child (Silverman, 1989), and parental aggression and violence, as well as the child's age at the onset of the disorder (Rutter, 1980), all of which are probably interrelated.

Parental Substance Abuse

Families in which there is parental substance abuse are often characterized as unstable and chaotic (Jackson, 1954). For most children, living with an addicted parent generates instability, indecisiveness, and feelings of guilt and hopelessness (Ackerman, 1983). Children of alcoholics tend to show difficulty in role functioning, lack appropriate problem-

solving skills, show general mistrust of others, have emotional problems, and display certain antisocial behaviors (Ackerman, 1983; Cork, 1969; Eldred, Grier, & Berliner, 1974; Elliot, Huizinga, & Ageton, 1985). Washton (1989) found that vulnerability to cocaine addiction was greater among those who had a family history of substance abuse. There is also evidence suggesting that alcoholism is passed on in families (Goodwin, Crane, & Guze, 1971; Harford, Haack, & Spiegler, 1987). Moreover, the severity and impact of dysfunctional parenting resulting from substance abuse may affect the child's adult behavior and self-concept, which may manifest in destructive coping behaviors such as substance abuse, mental illness, or criminal activity (Miller & Jang, 1977).

Out-of-Home Placement

Children who were victims of disrupted parental care (that is, foster care or institutional care) have higher rates of long-term stay in psychiatric care as adolescents (Dickson, Heffron, & Parker, 1990). The recognition of the long-term negative effects of out-of-home placement, such as housing instability or institutionalization, have prompted recent studies on how to help adolescents properly exit the child welfare system (Fanshel, Finch, & Grundy, 1989a, 1989b). Another group that experiences out-of-home placement is runaway youths (Powers & Jaklitsch, 1989), who are found to be at higher risk for self-destructive behavior, substance abuse, and physical and mental illness.

Risk Factors and Homelessness

These five childhood risk factors have been documented among the homeless population in many studies (D'Ercole & Struening, 1987; Piliavin, Sosin, & Westerfelt, 1988; Shinn, Knickman, & Weitzman, 1991; Sosin, Colson, & Grossman, 1988; Susser, Struening, & Conover, 1987; Wood, Valdez, Hayashi, & Shen, 1990). However, there is still a void in the knowledge regarding the impact of all childhood risk factors among this vulnerable subpopulation. Although massive evidence has been accumulated on the long-term impact of childhood risks, the specific impact of each risk or of co-occurrence of several risks on a variety of later-life behaviors has yet to be looked at carefully.

Study Purpose

In this study, we attempted to determine the impact of five childhood risk factors on dually diagnosed homeless people in three Philadelphia rehabilitation facilities. First, we assessed the prevalence of each of the five aforementioned childhood risk factors and their combinations in this population. Then we assessed the individual effects and the effects of two co-occurring childhood risk factors on the social functioning of clients when they entered rehabilitation. Because of a limited sample size, we analyzed only two co-occurring risk factors. Finally, we assessed the impact of single childhood risk factors on the ability of clients to benefit from rehabilitation.

Methods

Procedure

Data were gathered on 156 dually diagnosed homeless people in three comprehensive rehabilitation programs for dually diagnosed homeless adults in Philadelphia. These programs provided outreach, engagement, intensive case management, and residential services (Blankertz, Cnaan, White, Fox, & Messinger, 1990). The target population was homeless individuals with Axis I major mental illness and Axis I substance abuse/dependence. A few individuals with primary Axis II diagnoses, such as borderline personality disorder, were also admitted (American Psychiatric Association, 1987).

Clients were referred by homeless outreach workers, hospitals, drug and alcohol programs, and mental health programs. All three programs accepted all clients who were referred as long as the client was willing to accept services. Once a person was admitted into the program, he or she could leave at any time. In this respect, these clients are a unique group of very disadvantaged people who voluntarily agreed to be treated.

On entry to one of the service programs, each client was assessed and interviewed by a research assistant. This process took up to two months. The information obtained included basic intake data, personal history, family background, substance use history, mental illness history, homeless history, functional assessment, and social–psychological tests. Monthly assessment of the clients' progress in rehabilitation and recording of crises were routinely logged by the research assistants.

Sample

One hundred fifty-six clients entered the programs between November 1989 and May 1990. About two-thirds of clients (65.6 percent) were male. About two-thirds (63.8 percent) were black; 23.3 percent were white; and 12.9 percent were Hispanic. The average age was 34 years, with a standard deviation of 7.7

years and a range of 19 to 56 years. Typically, clients had been in the educational system for an average of 11.3 years, with a range of four to 16 years. About three-fourths (75.6 percent) had never been married, 9.8 percent were separated, and 14.6 percent were divorced. However, 62.0 percent had lived with a significant other, and 55.4 percent had children. All mothers had lost custody of their children because of mental illness or drug and alcohol problems.

Client psychiatric diagnoses included schizophrenia (62 percent), bipolar disorder (7 percent), posttraumatic stress disorder (3 percent), borderline personality disorder (3 percent), other (including unspecified adjustment disorder, 16 percent), and unknown (2 percent). Six percent currently did not have a psychiatric diagnosis; some were being assessed as primary substance abusers. These 6 percent were not included in the analysis, as they do not meet the criterion of dual diagnosis.

Examination of the pattern of substance abuse among clients revealed that 66 percent used alcohol; 55 percent cocaine; 40 percent marijuana; 29 percent heroin; 27 percent amphetamines; and 30 percent other drugs. More than half of the clients (57 percent) were multisubstance users. About three-fourths (73 percent) of clients began using drugs before age 17.

Instrument

A core set of instruments was used in the three programs. These instruments included a personal history form that included basic demographic information, homelessness history, family background, health history, and service use; the Addiction Severity Index (McClellan, Luborsky, Woody, & O'Brien, 1980); a homeless functional assessment that assessed skill levels in areas particularly sensitive to the target population and that was developed especially for this research project; and monthly rehabilitation assessments that record changes in client behavior in the rehabilitation program.

To achieve uniformity, the research assistants were provided with written case studies and were asked to complete the research forms. After two sessions, their level of interrater reliability was close to perfect (98 percent). Throughout the study, the same three research assistants collected data. Furthermore, the research team met weekly to discuss new cases and to solve jointly any doubts regarding rating and data entry.

Measurement of Risk Factors

As part of routine inquiry in the personal history instrument, clients were asked whether they had been sexually or physically abused and whether they had been placed out of the home. There was little probing as to the severity, type, or number of episodes of abuse, given that this information is often threatening in initial interviews (Westermeyer & Wahmenholm, 1989). Because of this method of data collection, our estimates of childhood maltreatments are binomial (occurred versus did not occur) and conservative. If in the process of study clients revealed to staff or research assistants that they had been abused, then the records were updated.

Clients were also asked whether any member of their family of origin abused drugs or alcohol and whether anyone was hospitalized for mental illness. In this study we used reports on parental substance abuse or mental illness to define childhood risk factors and did not use available data on siblings or other relatives. It was reported, however, that 15.2 percent did have siblings who were treated for mental illness, and 51.1 percent had siblings who abused alcohol or drugs. Similarly, in the initial interviews, clients were asked if they ever were placed in the care of others (including relatives, foster care, and institutions) for more than six months. Any positive response was recorded as an occurrence of out-of-home placement.

Results

An overwhelming majority of the dually diagnosed homeless people (89.6 percent) were subjected to at least one childhood risk factor. The types most frequently reported were physical abuse (53.1 percent); living with parents who abused drugs, alcohol, or both (49.0 percent); and out-of-home placement (47.3 percent). Lower rates were reported for clients who had mentally ill parents (31.9 percent) and who were sexually abused (29.2 percent). Although we did not probe to detect additional cases of sexual or physical abuse, staff had good reasons to believe (on the basis of clinical observations of behaviors often found in those who have been sexually abused) that at least another 34.5 percent may have been sexually abused. It was suspected that physical abuse occurred in another 25.4 percent of clients. Of those who were placed out of home, 24.2 percent were placed with other family members, 27.3 percent in foster care, 33.3 percent in institutions, and 15.2 percent in group homes.

Table 1 reports the combinations of two childhood risk factors. Although there are combinations with frequencies slightly higher than others, the differences are not significant, and thus there is no one dominant combination. More than half (56.3 percent) of the clients reported that they had suffered from more than one childhood risk factor, and 10.4 percent reported that they had suffered from all five childhood risk factors (Table 2). Almost all combinations were significant at the .05 level when tested by the chi-square tests of association, the two exceptions being sexual abuse with out-of-home placement and parents using drugs and alcohol with out-of-home placement (Table 1).

One goal of our study was to identify the associations between reported childhood risk factors and assessment of social functioning at entry. As seen in Table 3, eight components of social functioning are assessed. The three most affected by single childhood risk factors are the ability to be redirected, the ability to handle structure, and fighting. These three factors all manifest in situations in which professionals are requesting clients to control their impulses and accept external restrictions. Interestingly, none of the three social functioning skills was significantly associated with out-of-home placement, which was the only childhood risk factor significantly associated with the ability to engage with staff and the ability to handle stress. Thus, out-of-home placement carries with it unique long-term effects, which will be discussed later.

Table 1

Reported Rates of Combinations of Two Forms of Childhood Maltreatment (*N* = 156)

Types of Maltreatment	%	*p*
Physical abuse and sexual abuse	25.0	.001
Physical abuse and parents using drugs and alcohol	33.3	.01
Physical abuse and parents with mental health problems	27.1	.05
Physical abuse and out-of-home placement	31.25	.05
Sexual abuse and parents using drugs and alcohol	18.75	.05
Sexual abuse and parents with mental health problems	18.75	.01
Sexual abuse and out-of-home placement	22.9	NS
Parents using drugs and alcohol and parents with mental health problems	22.9	.05
Parents using drugs and alcohol and out-of-home placement	27.1	NS
Parents with mental health problems and out-of-home placement	20.8	.01

Table 2

Percentage of Clients by Total Number of Childhood Maltreatments (*N* = 156)

Number of Childhood Maltreatments	%	Cumulative %
5	10.4	10.4
4	14.6	25.0
3	12.5	37.5
2	18.8	46.3
1	33.3	79.6
0	10.4	100.0

Some additional significant associations did not form a clear empirical trend or were not based on a theoretical expectation. For example, the ability to handle group living was significantly associated with parents' mental illness only. Similarly, the motivation toward abstinence was significantly associated with sexual abuse only, and the ability to cope with mental health issues was significantly associated with parents' drug and alcohol abuse only.

In almost all significant associations and in most of the nonsignificant associations, a consistent trend emerged. Clients subjected to a specific childhood risk factor were rated as performing worse than clients who were not exposed to this risk factor. The only exception was in engagement with staff. In all cases of engagement with staff, clients subjected to the risk factor were rated as performing better than others. However, the only significant association for engagement with staff was with out-of-home placement (χ^2 [1] = 6.88, $p < .01$).

Our second goal was to test the associations between social functioning at entry and 10 possible combinations of two childhood risk factors. The summary of the results of these analyses is presented in Table 4. In some ways, the results replicate the findings from the analysis of single forms of childhood maltreatment. For example, fighting was associated with many of the combinations. Almost all significant and nonsignificant associations indicated that clients reported to have suffered two childhood risk factors were assessed as performing worse than the others in all cases, with the exception of engagement with staff.

This additional analysis, however, produced some new results. First, the combination that

Table 3

Childhood Maltreatment and Clients' Social Deficits, December 1989

Social Functioning by Maltreatment Type	*p*
Ability to be redirected	
by physical abuse	.05
by sexual abuse	.01
by parents using drugs and alcohol	NS
by parents with mental health problems	.01
by out-of-home placement	NS
Ability to handle group living	
by physical abuse	NS
by sexual abuse	NS
by parents using drugs and alcohol	NS
by parents with mental health problems	.05
by out-of-home placement	NS
Ability to handle structure	
by physical abuse	.05
by sexual abuse	.01
by parents using drugs and alcohol	.01
by parents with mental health problems	.05
by out-of-home placement	NS
Engaging with staff	
by physical abuse	NS
by sexual abuse	NS
by parents using drugs and alcohol	NS
by parents with mental health problems	NS
by out-of-home placement	.01
Ability to handle stress	
by physical abuse	NS
by sexual abuse	NS
by parents using drugs and alcohol	NS
by parents with mental health problems	NS
by out-of-home placement	.05
Motivation toward abstinence	
by physical abuse	NS
by sexual abuse	.05
by parents using drugs and alcohol	NS
by parents with mental health problems	NS
by out-of-home placement	NS
Ability to handle mental health issues	
by physical abuse	NS
by sexual abuse	NS
by parents using drugs and alcohol	.05
by parents with mental health problems	NS
by out-of-home placement	NS
Fighting	
by physical abuse	.01
by sexual abuse	.01
by parents using drugs and alcohol	.05
by parents with mental health problems	.01
by out-of-home placement	NS

yielded the largest number of significant associations with the types of social functioning was parent with both mental illness and substance abuse problems (that is, dually diagnosed parents). Second, sexual abuse, significantly associated with a number of social functioning skills when it was examined alone, did not have as powerful an impact when studied in combinations. Clients who reported sexual abuse and any other childhood risk factor were assessed as equal to other clients in all areas except fighting. This trend was also found for physical abuse.

The third goal of this study was to assess the impact of childhood risk factors on the rehabilitation process. Client progress was measured by assessment of eight social functioning skills in May 1990 as compared with the same skills originally assessed in December 1989 (at entry). Because clients entered and left the programs at different times, this analysis is based on 46 clients who entered rehabilitation in December 1989 and were still there in May 1990. Because of the small sample size, we could not replicate this analysis on combinations of two childhood risk factors. Also, the basic demographic traits of race, age, and sex had no impact on progress.

Most of the single risk factors were not significantly associated with progress in the rehabilitation program. The only exception was out-of-home placement. Out-of-home placement was significantly associated with ability to be engaged with staff (χ^2 [1] = 4.77, $p < .05$) and ability to handle stress (χ^2 [1] = 8.82, $p < .01$). Those who were not placed out of home progressed better than those who were. A third significant association was detected between out-of-home placement and willingness to work on dealing with mental illness (χ^2 [1] = 6.11, $p < .01$); however, in the latter association, those who were placed out of home showed greater progress.

Discussion

Our results suggest that childhood risk factors, whether single or multiple, are very prevalent among dually diagnosed homeless people. Caution should be used in generalizing the reported results to a less vulnerable population. Very little is known about the characteristics, behavior, and longitudinal life course of these individuals. Our measures of the risk factors are dichotomous (the risk exists or not) and may underrepresent actual occurrences. The findings indicated that large numbers of these

Table 4

Combinations of Two Childhood Maltreatment Types and Clients' Social Functioning, December 1989

Type of Maltreatment	1	2	3	4	5	6	7	8
Physical and sexual	NS	NS	NS	NS	NS	NS	NS	.01
Physical and D/A	NS	NS	NS	NS	NS	NS	.05	NS
Physical and MH	NS	NS	NS	NS	NS	NS	NS	.05
Physical and out	NS	NS	.05	NS	NS	NS	NS	.05
Sexual and D/A	NS	NS	NS	NS	NS	NS	NS	NS
Sexual and MH	NS	NS	NS	NS	NS	NS	NS	NS
Sexual and out	NS	NS	NS	NS	NS	NS	NS	.01
D/A and MH	NS	.05	NS	.01	NS	NS	.05	.05
D/A and out	NS	NS	NS	NS	NS	NS	NS	.01
MH and out	NS	NS	NS	NS	NS	NS	NS	NS

NOTE: Physical = physical abuse; sexual = sexual abuse; D/A = parents using drugs and alcohol; MH = parents with mental health problems; out = out-of-home placement; 1 = ability to be redirected; 2 = ability to handle group living; 3 = ability to handle structure; 4 = engaging with staff; 5 = ability to handle stress; 6 = motivation toward abstinence; 7 = ability to handle mental health issues; 8 = fighting.

individuals had childhoods that put them in a high-risk category for a number of problems later in life. In fact, the number reported as suffering from sexual or physical abuse is more comparable to prevalent rates among inpatient than outpatient populations. Although there was no control group in this study, it is likely that these factors played a key role in the etiology of clients' dual problems and homelessness. The impact of these five risk factors also negatively affects the overall level of social functioning of those individuals (that is, their ability to interact with others, to cooperate in rule-governed situations, to solve problems constructively, and to handle stress).

When analyzed singly, all five childhood risk factors were about equal in their significant associations with client behaviors at entry into the rehabilitation process. Each was significantly associated with three or four social functioning skills. Out-of-home placement was the factor associated with engagement with staff and ability to handle stress and was not significantly associated with fighting and handling structure at entry. Interestingly, out-of-home placement was also the only risk factor that had significant association with progress in the rehabilitation program. It seems clear that out-of-home placement has long-term effects. One possible explanation for the unique impact of out-of-home placement is that it usually happens only after other risk factors have occurred, and it is often a late reaction to other manifestations of neglect or abuse. Thus, out-of-home placement has an idiosyncratic cumulative impact. Another possible explanation is that perhaps rehabilitation for these clients is experienced as another placement, and they use mechanisms of engaging with professionals and handling group structure that were acquired in the past.

Contrary to the literature, there was an evident trend, although not statistically significant, for those who were exposed to the risk factors to be more engaged with staff at entry than for those who had not been maltreated. This finding may indicate that many clients are "system wise" (that is, are long-term users of services and systems providing help).

As the literature and our findings suggest, childhood risk factors are often interrelated, although a causal relationship is hard to determine (Caton, Gralnick, Bender, & Simon, 1990; Famularo, Stone, Barnum, & Wharton, 1986; Miller, Down, & Gondoli, 1989; Miller, Down, Gondoli, & Keil, 1987). About one-fourth of the clients had parents with a dually diagnosed profile. Social skills at time of entry in combination with dually diagnosed parents yielded the highest number of significant associations. We may be witnessing an intergenerational transmission of comorbidity, an alarming trend, given that second-generation dually diagnosed individuals reveal substantial social skills deficits compared with others, even within this multiply disadvantaged population.

The various childhood risk factors—with the exception of out-of-home placement—were not significantly associated (either positively or negatively) with behavioral change in the rehabilitation process. This finding may suggest that the impact of these risk factors remains persistent even during six months of extensive service. Progress can be achieved only in lengthy and concentrated intervention.

Conclusion

Our findings support previous studies that documented the association between childhood maltreatment of any form and devastating effects in adulthood. This growing body of literature calls for a variety of practice and policy implications that are beyond the scope of this article. Among such implications are the need to educate the public to prevent and report all forms of child maltreatment and the need to sensitize practitioners who work with families in which one or both parents are either severely mentally ill or substance abusing to prevent intergenerational transfer of disabilities. In addition, practitioners who work with the homeless population and specifically with dually diagnosed individuals should inquire about childhood maltreatments, as an understanding of these maltreatments can be a key to successful rehabilitation. Consequently, specific therapies for victims of childhood maltreatment are warranted (Herder & Redner, 1991).

There are many questions left for future study. For example, our data suggest that parental mental illness and substance abuse (parental comorbidity) has a long-term impact on adults that may be even greater than the specific incidents of physical abuse, sexual abuse, and out-of-home placement. This finding calls for additional research in the field and for practitioners to be alert to this problem and to assess its impact on their clients' ability to become engaged in the rehabilitative process.

The especially strong association for four of the five risk factors with fighting with others and with ability to handle structure is of special concern for service providers. Dually diagnosed individuals have been described in the literature as highly disruptive, and perhaps this is one reason they have been underserved. Programs to assist these clients should be prepared to handle such behaviors and should develop practice mechanisms to better manage such disruptions.

Our study focused on the homeless population; more research needs to be done on other segments of the dually diagnosed population, such as those who are domiciled or in jail, to discover if they also have been subjected to these childhood risk factors. If these findings hold true for other dually diagnosed subpopulations, then new service interventions may arise, along with a better understanding of these individuals. ■

References

Ackerman, R. (1983). *Children of alcoholics.* New York: Simon & Schuster.

American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., rev.). Washington, DC: Author.

Bassuk, E. (1984). The homelessness problem. *Scientific American, 251,* 40–45.

Blankertz, L. E., Cnaan, R. A., White, K. W., Fox, J., & Messinger, K. (1990). Outreach efforts with dually diagnosed homeless persons. *Families in Society, 71,* 387–397.

Bryer, J., Nelson, B., Miller, J., & Drol, P. (1987). Childhood sexual and physical abuse as factors in adult psychiatric illness. *American Journal of Psychiatry, 144,* 1426–1430.

Carmen, E. H., Rieker, P. P., & Mills, T. (1984). Victims of violence and psychiatric illness. *American Journal of Psychiatry, 141,* 378–383.

Caton, L. M., Gralnick, A., Bender, S., & Simon, R. (1990). Young chronic patients and substance abuse. *Hospital and Community Psychiatry, 40,* 1037–1040.

Conte, J., & Schuerman, J. (1987). Factors associated with an increased impact of child sexual abuse. *Child Abuse nd Neglect: The International Journal, 11,* 201–211.

Cork, M. R. (1969). *The forgotten children.* Ottawa: Addictive Research Foundation.

Crewdson, J. (1988). *By silence betrayed: Sexual abuse of children in America.* Boston: Little, Brown.

D'Ercole, A., & Struening, E. (1987, March). *Predictors of depression among homeless women: Implications for service delivery.* Paper presented at the 64th Annual Meeting of the American Orthopsychiatric Association, Washington, DC.

Dickson, L. R., Heffron, W. M., & Parker, C. (1990). Children from disrupted and adoptive homes on an inpatient unit. *American Journal of Orthopsychiatry, 60,* 594–602.

Eldred, C., Grier, V., & Berliner, N. (1974). Comprehensive treatment for heroin-addicted mothers. *Social Casework, 55,* 470–474.

Elliot, D. S., Huizinga, D., & Ageton, S. S. (1985). *Explaining delinquency and drug use.* Beverly Hills, CA: Sage Publications.

Erlenmeyer-Kimling, L. (1977). Issues pertaining to prevention and intervention of genetic disorders affecting human behavior. In G. W. Albee & J. M. Joffee (Eds.), *The issues: An overview of primary prevention* (pp. 68–79). Hanover, NH: University Press of New England.

Famularo, R., Stone, K., Barnum, R., & Wharton, R. (1986). Alcoholism and severe child maltreatment. *American Journal of Orthopsychiatry, 56,* 481–485.

Fanshel, D., Finch, S. J., & Grundy, J. F. (1989a). Foster children in life course perspective: The Casey family program experience. *Child Welfare, 68,* 467–478.

Fanshel, D., Finch, S. J., & Grundy, J. F. (1989b). Modes of exit from foster care and adjustment at time of departure of children with unstable life experience. *Child Welfare, 68,* 391–402.

Feldman, R., Stiffman, A., & Jung, K. (1987). *Children at risk.* New Brunswick, NJ: Rutgers University Press.

Finkelhor, D. (1988). The trauma of child sexual abuse. In G. E. Wyatt & G. J. Powell (Eds.), *Lasting effects of childhood sexual abuse* (pp. 61–82). Newbury Park, CA: Sage Publications.

Gammon, G. D. (1983). Disturbed child: Correlation shown. *Journal of the American Medical Association, 249,* 11–12.

Goodwin, D. W., Crane, J. B., & Guze, S. B. (1971). Felons who drink: An eight-year follow-up. *Quarterly Journal of Studies on Alcohol, 32,* 136–147.

Harford, T. C., Haack, M. R., & Spiegler, D. L. (1987). Positive history for alcoholism. *Alcohol Health and Research World, 12,* 138–143.

Herder, D. D., & Redner, L. (1991). The treatment of childhood sexual trauma in chronically mentally ill adults. *Health & Social Work, 16,* 50–57.

Hutchinson, E. D. (1990). Child maltreatment: Can it be defined? *Social Service Review, 64,* 60–78.

Jackson, J. K. (1954). The adjustment of the family to the crisis of alcoholism. *Quarterly Journal of Studies on Alcohol, 4,* 562–586.

Jacobson, A., & Richardson, B. (1987). Assault experiences of 100 psychiatric inpatients: Evidence of need for routine inquiry. *American Journal of Psychiatry, 144,* 908–913.

Kempe, R. S., & Kempe, H. (1984). *The common secret: Sexual abuse of children and adolescents.* New York: W. H. Freeman.

Kendler, D., & Eaves, L. (1986). Models for the joint effect of genotype and environment on liability to psychiatric illness. *American Journal of Psychiatry, 143,* 279–289.

McClellan, A. T., Luborsky, L., Woody, G. E., & O'Brien, C. P. (1980). An improved evaluation instrument for substance abuse patients: The addiction severity index. *Journal of Nervous and Mental Disease, 168,* 26–33.

Miller, B. A., Down, W. R., & Gondoli, D. M. (1989). Delinquency, childhood violence, and the development of alcoholism in women. *Crime and Delinquency, 35,* 94–108.

Miller, B. A., Down, W. R., Gondoli, D. M., & Keil, A. (1987). The role of childhood sexual abuse in development of alcoholism in women. *Violence and Victims, 2,* 157–172.

Miller, D., & Jang, M. (1977). Children of alcoholics: A 20-year longitudinal study. *Social Work Research & Abstracts, 13*(4), 23–29.

Piliavin, I., Sosin, M., & Westerfelt, H. (1988). *Conditions contributing to long-term homelessness: An exploratory study.* Madison: Institute for Research on Poverty, University of Wisconsin–Madison.

Powers, J. L., & Jaklitsch, B. W. (1989). *Understanding survivors of abuse: Stories of homeless and runaway adolescents.* Lexington, MA: Lexington Books.

Rieker, P., & Carmen, E. (1986). The victim-to-patient process. *American Journal of Orthopsychiatry, 56,* 360–370.

Rose, S., Peabody, C., & Stratigeas, B. (1991). Undetected abuse among intensive care management clients. *Hospital and Community Psychiatry, 42,* 499–503.

Rutter, M. (1980). *Changing youth in a changing society.* Cambridge, MA: Harvard University Press.

Rutter, M., & Quinton, D. (1984). Parental psychiatric disorder: Effects on children. *Psychological Medicine, 14,* 853–880.

Shinn, M., Knickman, J. R., & Weitzman, B. C. (1991). Social relationships and vulnerability to becoming homeless among poor families. *American Psychologist, 46,* 1180–1187.

Silverman, M. (1989). Children of psychiatrically ill parents: A prevention perspective. *Hospital and Community Psychiatry, 40,* 1257–1264.

Sosin, M. R., Colson, P., & Grossman, S. (1988). *Homeless in Chicago: Poverty and pathology, social institutions and social change.* Chicago: Chicago Community Trust.

Surrey, J., Suett, C., Michaels, A., & Levine, S. (1990). Reported history of physical and sexual abuse and severity of symptomatology in women psychiatric outpatients. *American Journal of Orthopsychiatry, 60,* 412–417.

Susser, E., Struening, E., & Conover, S. (1987). Childhood experiences of homeless men. *American Journal of Psychiatry, 144,* 1599–1601.

Washton, A. M. (1989). *Cocaine addiction: Treatment, recovery and relapse prevention.* New York: W. W. Norton.

Westermeyer, J., & Wahmenholm, K. (1989). Assessing the victimized psychiatric patient. *Hospital and Community Psychiatry, 40,* 245–249.

Wood, D., Valdez, R. B., Hayashi, T., & Shen, A. (1990). Homeless and housed families in Los Angeles: A study comparing demographics, economic, and family function characteristics. *American Journal of Public Health, 80,* 1049–1052.

Wyatt, G. E., & Powell, G. J. (1988). *The lasting effects of child sexual abuse.* Newbury Park, CA: Sage Publications.

Laura E. Blankertz, PhD, *is director of research, Matrix Research Institute, Philadelphia.* ***Ram A. Cnaan, PhD,*** *is associate professor, School of Social Work, University of Pennsylvania, 3701 Locust Walk, Philadelphia, PA 19104.* ***Erica Freedman, MSW,*** *is a social worker, University of Pennsylvania Hospital, Philadelphia. Please direct all correspondence concerning this article to Ram A. Cnaan.* *This project was supported by grant AA-87-04/23-1413304 for Comprehensive Services for Dually Diagnosed Homeless from the National Institute of Alcoholism and Alcohol Abuse. An earlier version of this article was presented at the 118th Annual Meeting of the American Public Health Association, New York, September 1990.*

Accepted February 19, 1992