

A transactional model of homelessness and alcoholism: Developing solutions for complex problems



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Homelessness and alcoholism are complex and interrelated issues representing major public health concerns. Within the context of structural or macro-level factors (e.g., poverty, unemployment, housing affordability), persons become and remain homeless due to the contribution of individual-level vulnerabilities. Alcoholism is one of the most prevalent and impactful individual-level factors contributing to the experience, maintenance and exacerbation of homelessness. A transactional model is proposed demonstrating that alcoholism is a predisposing and precipitating cause of homelessness, that it interferes with mitigating factors, and that it exacerbates other issues contributing to homelessness. This paper discusses opportunities for prevention and intervention efforts related to this transactional perspective of the relationships between homelessness and alcoholism.

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As national leaders including the President and the Secretary of the Department of Veteran Affairs renew their commitment to ending homelessness, policy makers and researchers are re-examining what we know about the factors causing and maintaining homelessness. Homelessness can be said to be the result of both structural and individual factors. Sclar's¹ early editorial described this as a game of musical chairs, the chairs being the structural factors such as availability of affordable housing and the players "winning" chairs based on their individual vulnerabilities. As a result the most vulnerable (e.g., those with personal disabilities) are left without housing. Alcoholism is a truly pervasive and insidious vulnerability whose role has not been emphasized or adequately addressed in many policy and service efforts. To truly address one public health issue – homelessness –it is important to understand another – alcoholism – and the complex ways they transact to perpetuate this devastating community health issue.

There is little question that without structural or macro-level factors, such as poverty and lack of affordable housing, homelessness would virtually cease to exist. There are increasing levels of agreement that people become and remain homeless due to a combination of structural or macro-level factors and personal vulnerabilities^{2,3} (See Table 1). The identification of vulnerabilities is vital for preventing homelessness, ending chronic homelessness, and optimally allocating homelessness resources. Personal vulnerabilities such as substance abuse undermine one's abilities to negotiate with the labor and housing markets, use the welfare system, or obtain support from family and friends. Alcoholism is a common characteristic among those who are chronically homeless and has a deteriorating course over time. Without intervention homelessness associated with alcohol-related pathology runs the risk of becoming intractable.

[Insert Table 1 here]

Prevalence of alcoholism among homeless populations

Fischer and Breakey's⁴ review of homelessness research with sound methodologies in the 1980s estimated that alcohol disorders are prevalent in 66% of homeless individuals. Other studies have found similar prevalence rates including: 1) a meta-analysis of 18 studies that estimated the prevalence of alcohol use disorders among homeless populations to be 43 – 52%⁵; 2) in-depth interviews with 2, 938 adult homeless clients where 72% reported drinking alcohol regularly⁶; and 3) a study of newly homeless men and women showing that 53% had a lifetime diagnosis of substance use disorder, with alcohol use disorders the most common⁷. One study found an astounding 78.3% of homeless respondents met *DSMIII-R* criteria for substance abuse or dependence for alcohol and/or drugs⁸. These prevalence estimates among homeless persons stand in dramatic comparison to housed samples. For instance, the National Comorbidity Survey⁹ found lifetime prevalence rates of 9.4% for alcohol abuse and 14.1% for alcohol dependence among adults housed in the community.

Concerning family and gender status single men have been found to have the highest rates of current alcoholism diagnosis and the highest rates of being continuously homeless¹⁰. Homeless men, as with men in the population at large¹¹, are more likely to have substance abuse disorders, to have been treated for them, and to request substance abuse treatment services^{4, 12 - 17}. Consistently, homeless parents report substance abuse more frequently than parents in housed poor families, but far less often than homeless single individuals¹⁸.

Transactional model

While the prevalence of alcohol use disorders among homeless populations is established, the causal relationships and pathways of impact are more complex. Sosin and Bruni¹⁹

hypothesized that homelessness among alcohol dependent people results from the interaction of four individual factors that increase vulnerability: 1) deficient personal resources—education, social and job skills; 2) deficient social network —homeless people don't have the social support to avoid destitution; 3) disaffiliation—alcohol misuse is associated with an inability to retain or regain helpful connections, isolation, and withdrawal from society beyond the effects of the social network; and 4) mental health—those with alcohol-related problems are particularly at risk when further disabled by mental health problems. There is increasing agreement among researchers that complex behavioral relationships are best studied within a multi-causal, transactional paradigm²⁰⁻²². Transactionalism examines multiple interacting variables in understanding or predicting a phenomenon over time. Transaction can be distinguished from interaction by feedback loops, reciprocal causation, and mutual influence. Homelessness at one point in time may be considered a consequence of the transaction of structural and individual variables, while at another point in time it is antecedent to structural and individual changes²³.

Rather than identifying the cause of homelessness, the transactional paradigm outlines predisposing and precipitating causes, as well as mutual influences of mitigating and exacerbating factors. Homelessness in turn influences alcohol-related pathology, producing a self-maintaining feedback loop.

Alcoholism as a primary cause of homelessness

Research suggests that alcohol use disorders precede episodes of homelessness in as much as 80% of the cases^{24, 25}. North²⁵ found that on average dependence symptoms occurred 9.8 years before the first homelessness episode for alcohol and 5.8 years for drug dependence. Issues

such as mental health symptoms and lack of social support have been shown to predict homelessness among participants after leaving substance abuse treatment programs^{26, 27}. Homeless individuals often mention alcohol or drug use as a major reason for their becoming homeless^{8, 25}.

Alcoholism as a distal factor in homelessness

There is also evidence that alcoholism precipitates other factors that lead to homelessness, and interrupts protective factors. Poverty is one of the strongest single determinants of homelessness, and employment is one of the strongest buffers²⁸. Early onset of alcohol use disorder in men appears to lead to a reduction in personal resources resulting in financial instability and the inability to pay rent and maintain housing^{25, 29}. Homeless males perceive that the major cause of their current episode of homelessness to be due to loss of employment and loss of income caused by substance abuse problems³⁰. Further, men with serious substance abuse problems may have a transient lifestyle and sporadic work records that hamper their ability to find work^{3, 31}.

Alcoholism also precipitates the interruption of other protective factors related to the experience of homelessness. Substance abuse diminishes the protective benefits of support from a social network, for example, particularly among men³². Regardless of the size of the social network, homeless people with alcohol problems receive less help from others¹⁹. Adverse childhood experiences are theorized to lead to early onset of alcohol use and personal resource problems such as poor job skills, poor social skills, and inadequate education, which increase vulnerability to homelessness^{18, 33-38}.

Alcoholism and other comorbidities

Alcoholism and other substance use disorders often co-occur with other risk factors for homelessness, exacerbating their impact and serving to: 1) quicken the entrance into homelessness; 2) augment negative consequences experienced; and 3) delay the exit from homelessness³⁹. Among those with severe and persistent mental illness, for example, even a moderate level of substance use can worsen psychiatric symptoms sufficiently to lead to the loss of a domicile⁴⁰⁻⁴³.

As with mental health disorders, using alcohol increases the chances of using other drugs and increases the risk of homelessness associated with the use of other drugs⁴⁴. As with other risk factors, there are transactional relationships. Compared to groups of homeless individuals characterized as dependent upon alcohol, drugs, or neither, research suggests that individuals with polysubstance dependence are significantly younger at first episode of homelessness, are more likely to have experienced physical and mental health problems, and have more childhood and adolescent risk factors for homelessness including out of home placement, family and housing instability, and caretaker disability³⁵. Both alcohol and homelessness have shown to be risk factors for mortality in a sample of opiate drug users⁴⁵.

An unfortunate synergy is formed by the combination of alcoholism and homelessness resulting in increased physical health problems. Chronic infections, traumatic injuries, malnutrition, diabetes, and liver diseases are associated with homelessness and alcoholism⁴. Homeless individuals with alcohol-related disorders are many times more likely than those without to have liver disease, serious trauma, seizure, other neurological disorders and nutritional deficiencies. Those misusing alcohol tend to engage in high-risk, health endangering behaviors resulting in head injuries, fights, traffic accidents, and prostitution, thereby increasing the risk of sexually transmitted diseases⁴⁶. Increased severity of physical problems has been linked to an

increase in the severity of drinking problems^{4, 35, 47}. There is some evidence that homeless adults screening positive for problem alcohol use are less likely than those without alcohol use problems to have access to care when needed⁴⁸.

Alcoholism exacerbating and maintaining homelessness

Homeless individuals who have not been dependent on alcohol appear to have a different and more optimistic course with fewer and shorter episodes of homelessness^{33, 35}. There is a strong relationship between long-term homelessness and chronic alcoholism^{49, 50}. People who have been chronically homeless often attribute their continued homelessness to a substance abuse problem³, perhaps in part because of propensities to disengage from society⁵¹. The median duration of homelessness tends to be longer among those with a lifetime history of substance abuse treatment, a proxy for a history of substance use disorders⁷.

Homelessness exacerbating and maintaining alcoholism

To further illustrate the transactional nature of the relationship, homelessness may either increase alcoholism⁵² or exacerbate its negative consequences²⁹. There is also evidence that homeless alcohol-dependent persons experience more severe forms of alcoholism than those that are housed⁴. Homeless persons with alcohol dependence appear to have more problematic drinking patterns including duration, regularity, frequency, amount, and symptoms. They also have a higher prevalence of mental health, social, and vocational problems than alcohol dependent domiciled persons⁴.

To summarize, studies indicate that alcohol problems are prevalent among a large proportion of the homeless⁵; however, the relationship between the homelessness and alcoholism is not straightforward, especially given the heterogeneity of the homeless population¹⁵. Figure 1

presents a model of the transactional relationship between alcoholism and homelessness in the development of chronic homelessness. Within the structural context, the transaction of alcoholism and homelessness is hypothesized to facilitate impairment in cognitive and personal functioning and to increase disaffiliation. Impairment and disaffiliation then mitigate protective personal and social resources. It is hypothesized that the final common pathway of this transaction is chronic homelessness.

[Insert Figure 1 here]

Transactions among systems

Individuals with alcohol use disorders and histories of homelessness are often involved with multiple service systems like the community support, behavioral healthcare, and criminal justice systems. To design effective interventions it is important to understand destructive transactions, especially when they involve multiple complex systems. Several large-scale epidemiological studies have documented significant associations between alcohol use disorders and homelessness among those in the criminal justice system^{53, 54, 55}. Substance abuse is significantly associated with criminal justice involvement. Among homeless persons experiencing an arrest, one in two arrests are directly attributable to alcohol and drug use, with nearly one in four indirectly relating to substance abuse⁸. For those with co-occurring mental illnesses this association is especially strong^{56, 57}.

The prevalence of homelessness is also much greater among incarcerated populations when compared to the general population^{54, 55}. Criminal justice involvement often precedes homelessness among those experiencing long-term incarceration⁵³, and prior criminal justice involvement is associated with longer durations of homelessness⁷. Incarcerated persons who are

homeless are significantly more likely to experience multiple episodes of incarceration compared to others who have been arrested or incarcerated and are not homeless⁵⁸.

Public health policy responses to the issue

The prevalence figures alone emphasize the central role of alcoholism in the homeless population and the need to attend to alcohol problems in preventing, shortening, and ending homelessness episodes⁵⁹. Using the transactional perspective to guide interventions, certain principles are suggested. The overarching principle of integrating services to address homeless individuals' and families' behavioral health, housing, and economic needs is supported⁶⁰. This approach also highlights the need to address comorbidities. For example, programs designed to prevent homelessness among people with mental illnesses need to address substance abuse issues⁶⁰.

Despite the fact that alcoholism is very common among homeless persons, many traditional housing programs require individuals to be sober for a period of time before they can participate. Often homeless individuals do not qualify for such programs because they either cannot meet or do not choose to comply with such sobriety requirements. This situation perpetuates the negative transactional consequences of alcoholism, preventing an exit from homelessness. Interventions that break the vicious transactional cycle appear to be the most effective. An emerging body of research has examined “low demand” programs that are more tolerant to alcohol use. One such low demand program is the Housing First⁶¹ model. The Housing First framework is more lenient towards alcohol use, and its highest priority is to house individuals regardless of their sobriety or mental health status.

Research on Housing First programs indicates that residents who drink alcohol exhibit comparable outcomes to their sober counterparts⁶². Another national, multi-site housing found

that for those with substance use disorders, individuals in a Housing First group performed comparably to those who received prior residential and transitional services⁶³. Thus there was no benefit to providing the additional services before community placement, and the additional services have cost implications. One analysis found that, among chronically homeless individuals with high service utilization, a Housing First approach was associated with decreased costs⁶⁴.

Additional important efforts include the United States Department of Veterans Affairs' emphasis on considering both alcohol abuse and homelessness in discharging veterans from health care services^{65,66}. Other interventions designed to break the criminal justice, homelessness, and alcoholism transactions include those that divert vulnerable individuals from jail⁶⁷ and those that serve at risk individuals as they re-enter the community from incarceration⁶⁸.

Understanding more about the role of substance abuse in a homeless person's life, as well as the extent to which it has undermined other resources and the severity of its impact on their life, can guide providers and service systems in the determining the extent of services needed^{69,70}. Homelessness can be considered a risk factor for substance abuse⁷¹ and alcoholism a risk factor for homelessness. Therefore interventions addressing one can be considered interventions or preventions of the other. As homelessness and behavioral healthcare services at the federal and local levels tend to be fragmented and in "silos", a more holistic public health perspective can serve an important role in combating these social problems and informing social policy and legislation.

References

1. Sclar ED. Homelessness and housing policy: A game of musical chairs. *American Journal of Public Health* 1990;80(9):1039-1040.
2. Koegel P, Burnam A, Baumohl J. The causes of homelessness. In: Baumohl J, editor. *Homelessness in America*. Phoenix, Arizona: The Oryx Press; 1996. p. 24-33.

3. Morrell-Bellai T, Goering P, Boydell KM. Becoming and remaining homeless: A qualitative investigation. *Issues in Mental Health Nursing* 2000;21:581-604.
4. Fischer PJ, Breakey WR. The epidemiology of alcohol, drug, and mental disorders among homeless persons. *American Psychologist* 1991;46(11):1115-1128.
5. Lehman AF, Cordrey DS. Prevalence of alcohol, drug, and mental disorders among the homeless: one more time. *Contemporary Drug Problems* 1993:355-386.
6. Burt M. Critical factors in counting the homeless: An invited commentary. *American Journal of Orthopsychiatry* 1995;65(3):334-339.
7. Caton CLM, Dominguez B, Schanzer B, Hasin DS, Shrout PE, Felix A, et al. Risk factors for long-term homelessness: Findings from a longitudinal study of first-time homeless single adults. *American Journal of Public Health* 2005;95(10):1753-1759.
8. O'Toole TP, Gibbon JL, Hanusa BH, Freyder PJ, Conde AM, Fine MJ. Self-reported changes in drug and alcohol use after becoming homeless. *American Journal of Public Health* 2004;94(5):830-835.
9. Kessler RC, Crum RM, Warner LA, Nelson CB, Schulenberg J, Anthony JC. Lifetime co-occurrence of DSM-III-R alcohol abuse and dependence with other psychiatric disorders in the national comorbidity survey. *Archives of General Psychiatry* 1997;54:313-321.
10. Wong YI, Piliavin I, Wright BR. Residential transitions among homeless families and homeless single individuals: a comparison study. *Journal of Social Service Research* 1998;24(1/2):1-27.
11. Plant M, Miller P, Thornton C, Plant M, Bloomfield K. Life stage, alcohol consumption patterns, alcohol-related consequences, and gender. *substance abuse* 2000;21(4):265-281.
12. Baker SG. Gender, ethnicity, and homelessness. *American Behavioral Scientist* 1994;37(4):476-504.
13. DiBlasio FA, Belcher JR. Gender differences among homeless persons: special services for women. *American Journal of Orthopsychiatry* 1995;65(1):131-137.
14. Opler LA, White L, Caton C, Dominguez B, Hirshfield S, Shrout P. Gender differences in the relationship of homelessness to symptom severity, substance abuse, and neuroleptic noncompliance in schizophrenia. *The Journal of Nervous and Mental Disease* 2001;189(7):449-456.
15. Roll CN, Toro PA, Ortola GL. Characteristics and experiences of homeless adults: a comparison of single men, single women, and women with children. *Journal of Community Psychology* 1999;27(2):189-198.
16. Stein JA, Gelberg L. Homeless men and women: differential associations among substance abuse, psychosocial factors, and severity of homelessness. *Experimental and Clinical Psychopharmacology* 1995;3(1):78-86.
17. Zlotnick C, Robertson MJ, Lahiff M. Getting off the streets: Economic resources and residential exits from homelessness. *Journal of Community Psychology* 1999;27(2):209-224.
18. Shinn M, Weitzman BC, Stojanovic D, Knickman JR, Jimenez L, Duchon L, et al. Predictors of homelessness among families in new york city: from shelter request to housing stability. *American Journal of Public Health* 1998;88(11):1651-1657.
19. Sosin MR, Bruni M. Homelessness and vulnerability among adults with and without alcohol problems. *Substance Use & Misuse* 1997;32(7-8):939-968.
20. Lazarus R, Folkman S. *Stress, appraisal and coping*. New York: Springer; 1984.

21. Osofsky JD, Lieberman AF. A call for integrating a mental health perspective into systems of care for abused and neglected infants and young children. *American Psychologist* 2011;66(2):120-128.
22. Leflot G, van Lier PA, Verschueren K, Onghena P, Colpin H. Transactional associations among teacher support, peer social preference, and child externalizing behavior: A four-wave longitudinal study. *Journal of Clinical Child and Adolescent Psychology* 2011;40(1):87-99.
23. Main T. How to think about homelessness: Balancing structural and individual causes. *Journal of Social Distress and Homelessness* 1998;7(1):41-54.
24. Koegel P, Burnam MA, Morton SC. Enumerating homeless people. *Evaluation Review* 1996;20(4):378-403.
25. North CS, Pollio DE, Smith EM, Spitznagel EL. Correlates of early onset and chronicity of homelessness in a large urban homeless population. *The Journal of Nervous and Mental Disease* 1998;186(7):393-400.
26. Kingree JB, Stephens T, Braithwaite R, Griffin J. Predictors of homelessness among participants in a substance abuse treatment program. *American Journal of Orthopsychiatry* 1999;69(2):261-266.
27. Stahler GJ, Godboldte C, Shipley TE, Shandler IW, Ijoy L, Weinberg A, et al. Preventing relapse among crack-using homeless women with children: Building bridges to the community. In: Smith EM, Ferrari JR, editors. *Diversity within the homeless population*. Binghamton, N. Y.: Haworth Press; 1997. p. 53-66.
28. National Coalition for the Homeless. *Who is Homeless? Fact Sheet #3: 2002*.
29. Johnson TP, Freels SA, Parsons JA, Vangeest JB. Substance abuse and homelessness: social selection or social adaptation? *Addiction* 1997;92(4):437-445.
30. Tessler R, Rosenheck R, Gamache G. Gender differences in self-reported reasons for homelessness. *Journal of Social Distress and Homelessness* 2001;10(3):243-253.
31. Dennis DL, Buckner JC, Lipton FR, Levine IS. A decade of research and services for homeless mentally ill persons. *American Psychologist* 1991;46(11):1129-1138.
32. Zlotnick C, Tam T, Robertson MJ. Disaffiliation, Substance use, and exiting homelessness. *Substance Use and Misuse* 2003;38(3-6):577-599.
33. Bassuk EL, Buckner JC, Weinreb LF, Browne A, Bassuk SS, Perloff JN. Homelessness in female-headed families: childhood and adult risk and protective factors. *American Journal of Public Health* 1997;87(2):241-248.
34. Bennett EA, Kemper KJ. Is abuse during childhood a risk factor for developing substance abuse problems as an adult? *Developmental and Behavioral Pediatrics* 1994;15(6):426-429.
35. Booth B, Sullivan G, Koegel P, Burnam A. Vulnerability factors for homelessness associated with substance dependence in a community sample of homeless adults. *American Journal of Alcohol Abuse* 2002;28(3):429-452.
36. Herman DB, Susser ES, Struening EL, Link BL. Adverse childhood experiences: are they risk factors for adult homelessness? *American Journal of Public Health* 1997;87(2):249-255.
37. Koegel P, Melamid E, Burnam A. Childhood risk factors for homelessness among homeless adults. *American Journal of Public Health* 1995;85(12):1642-1649.
38. Stein JA, BLM, Nyamathi A. . Relative contributions of parent substance use and childhood maltreatment to chronic homelessness, depression, and substance abuse problems among homeless women: Mediating roles of self-esteem and abuse in adulthood. *Child Abuse & Neglect* 2002;26(10):1011-1027.

39. Fichter MM, Quadflieg N. Course of alcoholism in homeless men in Munich, Germany: results from a prospective longitudinal study bases on a representative sample. *Substance Use and Misuse* 2003;38(3-6):395-427.
40. Drake RE, Osher FC, Wallach MA. Homelessness and dual diagnosis. *American Psychologist* 1991;46:1149-1158.
41. Burt M, Aron LY, Lee E, editors. *Helping America's Homeless: Emergency Shelter or Affordable Housing*. Washington, D. C.: Urban Institute Press; 2001.
42. Drake RE, Mueser KT. Alcohol-use disorder and severe mental illness. *Alcohol Health & Research World* 1996;20(2):87-93.
43. Reardon ML, Burns AB, Preist R, Sachs-Ericsson N, Lang AR. Alcohol use and other psychiatric disorders in the formerly homeless and never homeless: prevalence, age of onset, comorbidity, temporal sequencing, and service utilization. *Substance Use and Abuse* 2003;38(3-6):601-644.
44. Dennis ML BR, Iachan R, Thornberry J. . *Drug use and homelessness*. Thousand Oaks, CA: Sage Publications, Inc; US; 1999.
45. Gossop M, Stewart D, Treacy S, Marsden J. A prospective study of mortality among drug misusers during a 4 year period after seeking treatment. *Addiction* 2002;97:39-47.
46. National Institute on Alcohol Abuse and Alcoholism. *Alcohol Research & Health* 2001;25(4).
47. McMurray-Avila M, Gelberg L, Breakey W. Balancing act: Clinical practices that respond to the needs of homeless people. In: Fosburg L, Dennis D, editors. *Practical Lessons: The 1998 National Symposium on Homelessness Research*. Washington, DC: U. S. Department of Housing and Urban Development; 1999.
48. Savage C LC. Health status and access to care for homeless adults with problem alcohol and drug use. *Journal of Addictions Nursing* 2008;19(1):27-33.
49. Gregoire T. Subtypes of alcohol involvement and their relationships to exits from homelessness. *Substance Use & Misuse* 1996;31(10):1333-1357.
50. Susser E, Struening E, Conover S. Psychiatric problems in homeless men. *Archives of General Psychiatry* 1989;46(9):845-850.
51. Sosin MR, Bruni M. Homelessness and vulnerability among adults with and without alcohol problems. *Substance Abuse and Misuse* 1997;37(7&8):939-968.
52. Winkleby MA, Rockhill B, Jatulis D, Fortman SP. The medical origins of homelessness. *American Journal of Public Health* 1992;82(10):1394-1398.
53. Greenberg GA, Rosenheck RA. Homelessness in the state and federal prison population. *Criminal Behaviour and Mental Health* 2008;18(2):88-103.
54. Greenberg GA, Rosenheck RA. Jail incarceration, homelessness, and mental health: A National Study. *Psychiatr Serv* 2008;59(2):170-177.
55. Shelton KH TP, Bonner A, van den Bree M. Risk factors for homelessness: evidence from a population-based study. *Psychiatric Services* 2009;60(4):465-472.
56. Constantine R AR, Petrila J, Becker M, Robst J, Teague G, et al. Characteristics and experiences of adults with a serious mental illness who were involved in the criminal justice system. *Psychiatric Services* 2010;61(5):451-457.
57. Junginger J CK, Laygo R, Crisanti A. Effects of serious mental illness and substance abuse on criminal offenses. *Psychiatric Services* 2006;57(6):879-882.
58. McNeil DE, Binder RL, Robinson JC. Incarceration associated with homelessness, mental disorder, and co-occurring substance abuse. *Psychiatric Services* 2005;56(7):840-846.

59. North CS, Eyrich KM, Pollio DE, Spitznagel EL. Are rates of psychiatric disorders in the homeless population changing? *American Journal of Public Health* 2004;94(1):103-108.
60. Fazel S, Khosla V, Doll H, Geddes J. The prevalence of mental disorders among the homeless in western countries: systematic review and meta-regression analysis. *PLoS medicine* 2008;5(12).
61. Tsemberis S, Gulcur L, Nakae M. Housing first, consumer choice, and harm reduction for homeless individuals with a dual diagnosis. *American Journal of Public Health* 2004;94(4):651-656.
62. Edens EL, Mares AS, Tsai J, Rosenheck RA. Does active substance use at housing entry impair outcomes in supported housing for chronically homeless persons? *Psychiatric Services* 2011;62(2):171-178.
63. Tsai J, Mares AS, Rosenheck RA. A multisite comparison of supported housing for chronically homeless adults: "housing first" versus "residential treatment first". *Psychological Services* 2010;7(4):219-232.
64. Larimer ME, Malone DK, Garner MD, Atkins DC, Burlingham B, Lonczak HS, et al. Health care and public service use and costs before and after provision of housing for chronically homeless persons with severe alcohol problems. *JAMA: The Journal of the American Medical Association* 2009;301(13):1349-1357.
65. Irmiter C, McCarthy JF, Barry KL, Soliman S, Blow FC. Reinstitutionalization following psychiatric discharge among VA patients with serious mental illness: A national longitudinal study. *Psychiatric Quarterly* 2007;78(4):279-286.
66. Sussner BD, Kline A, Smelson DA, Losonczy M, Salvatore SJ. The role of psychosocial characteristics in premature discharge from residential services for homeless veterans. *Psychological Services* 2008;5(4):341-350.
67. Rivas-Vazquez RA, Sarria M, Rey G, Rivas-Vazquez AA, Rodriguez J, Jardon ME. A relationship-based care model for jail diversion. *Psychiatric Services* 2009;60(6):766-771.
68. Osher F, Steadman HJ, Barr H. A best practice approach to community reentry from jails for inmates with co-occurring disorders: The APIC model. *Crime & Delinquency* 2003;49(1):79-96.
69. Clark C, Rich A. Outcomes of homeless adults with mental illness in a housing program and in case management only. *Psychiatric Services* 2003;54(1):78-83.
70. Culhane DP MS. Rearranging the deck chairs or reallocating the lifeboats?: Homelessness assistance and its alternatives. *Journal of the American Planning Association* 2008;74(1):111-121.
71. Johnson TP FM. Homelessness and drug use: evidence from a community sample. *American Journal of Preventive Medicine* 2007;32(6, Supplement 1):S211-S218.