

Health Care for the Homeless

RESEARCH UPDATE

Volume VII, No. 3

July 2006

A publication of the National Health Care for the Homeless Council, Inc. and the HCH Clinicians' Network. Production and distribution are made possible by a grant from the Health Services and Resources Administration.

Each quarter, research databases are searched for publications related to health care and homelessness. Many of the results from this customized search can also be found in a research database on the HCH Information Resource Center website at www.bphc.hrsa.gov/hchirc/bibliographies. This issue of the HCH RESEARCH UPDATE includes a sample of summaries resulting from the search of publications from (approximately) April–June 2006. Summaries are categorized into themes which vary each quarter.

PROGRAMS/INTERVENTIONS REDUCING HOSPITALIZATION

Title: Managing Acutely Ill Substance-Abusing Patients in an Integrated Day Hospital Outpatient Program - Medical Therapies, Complications, and Overall Treatment Outcomes

Authors: O'Toole TP, Conde-Mortel A, Young JH, Price J, Bigelow G, Ford DE

Source: Journal of General Internal Medicine, 21(6):570-576, June 2006.

Summary: Substance-abusing adults are admitted to hospitals for medical complications from their drug and alcohol use at substantially higher rates than the general public; yet, their care is often defined by against medical advice (AMA) discharges and low rates of referral to addiction treatment programs. We present findings from a chart review of consecutive admissions to an integrated medical-substance abuse treatment program designed for acutely ill, hospitalized substance using adults. We specifically looked at factors associated with program completion and medical complications in this cohort of at-risk adults. Overall, 83 patient cases were studied. The mean age was 41.2 years; most were African American (73.5%), male (68.7%), and homeless (77.1%). Heroin (96.4%) and cocaine (88.0%), followed by alcohol (44.6%) were the most commonly used substances before admission. The most common admitting diagnoses were infectious endocarditis (43.4%), abscess or nonhealing ulcer (18.1%), and osteomyelitis (13.3%) with intravenous antibiotic (68.7%), physical therapy (48.2%), or wound care (41.0%), the most commonly prescribed care on the integrated care/day hospital unit. The mean length of stay in the day hospital was 12.4 days. Overall, 69.9% of patients successfully completed their medical therapy, and 63.9% were successfully referred to an outpatient substance abuse treatment program. Only 10.8% required an unscheduled hospital readmission and 15.7% required an after-hours emergency department visit during their stay.

Outpatient/day hospital-based integrated treatment is a viable option for medically ill substance-abusing adults who would otherwise be hospitalized and is associated with higher than expected completion rates and low rate of complications. Co-locating the unit at a hospital and integrating extensive social supports appear to be key components to this model.

Title: Impact of the San Diego Serial Inebriate Program on Use of Emergency Medical Resources

Authors: Dunford JV, Castillo EM, Chan TC, Vilke GM, Jenson P, Lindsay SP

Source: Annals of Emergency Medicine, 47(4):328-336, April 2006.

Summary: We determine the impact of a treatment strategy called the San Diego Serial Inebriate Program on the use of emergency medical services (EMS) and emergency department (ED) and inpatient services by individuals repeatedly arrested for public intoxication. This was a retrospective review of health care utilization records (EMS, ED, and inpatient) of 529 individuals from 2000 to 2003. Judges offered individuals a 6-month outpatient treatment program in lieu of custody (Serial Inebriate Program). Demographics and health care utilization are reported overall and by treatment acceptance. From 2000 to 2003, 308 of 529 (58%) individuals were transported by EMS 2,335 times; 409 of 529 (77%) individuals amassed 3,318 ED visits, and 217 of 529 (41%) individuals required 652 admissions, resulting in 3,361 inpatient days. Health care charges totaled \$17.7 million (EMS, \$1.3 million; ED, \$2.5 million; and inpatient, \$13.9 million). Treatment was offered to 268 individuals, and 156 (58%) accepted. Use of EMS, ED, and inpatient services declined by 50% for clients who chose treatment, resulting in an estimated decrease in total monthly average charges of \$5,662 (EMS), \$12,006 (ED), and \$55,684 (inpatient). There was no change in use of services for individuals who refused treatment. There was a significant increasing trend in acceptance among individuals with longer jail sentences. Treatment acceptance was 20% among those with sentences of 0 to 30 days and reached 63% for those with sentences longer than 150 days. Operational costs and alternate care at clinics and nonparticipating hospitals were not analyzed. This community-supported treatment strategy reduced the use of EMS, ED, and inpatient resources by individuals repeatedly intoxicated in public.

Title: Providing Health Care Services to the Formerly Homeless: A Quasi-Experimental Evaluation

Authors: Ciaranello AL, Molitor F, Leamon M, Kuenneth C, Tancredi D, Diamant AL, Kravitz RL

Source: Journal of Health Care for the Poor and Underserved, 17(2):441-461, May 2006.

Summary: We performed a quasi-experiment to assess the effects of a focused health care intervention delivered in transitional housing facilities in Sacramento, California. Four transitional housing facilities (THFs) receiving the intervention were compared with 2 THFs that did not receive it. A multidisciplinary team provided a diverse package of services to residents at the intervention sites. Residents at comparison sites received usual care. Survey and physical examination data were collected in repeated cross-sectional surveys at baseline (pre-intervention) and after 6 and 18 months of follow-up (post-intervention). Using analysis of covariance techniques, our statistical models showed improved odds of receiving recommended gynecologic preventive care and decreased odds of frequent Emergency Department use at 18 months among residents at the intervention sites. At 6 months, residents at the intervention sites also experienced improved blood pressure control. There was no intervention effect on residents' access to specialists or on physical functioning, mental health, or dental health.

HOUSING IMPACTS AND OUTCOMES

Title: Impact of Permanent Supportive Housing on the Use of Acute Care Health Services by Homeless Adults

Authors: Martinez TE, Burt MR

Source: Psychiatric Services, 57(7):992-999, July 2006.

Summary: This analysis examined the impact of permanent supportive housing on the use of acute care public health services by homeless people with mental illness, substance use disorder, and other disabilities. The sample consisted of 236 single adults who entered supportive housing at two San Francisco sites, Canon Kip Community House and the Lyric Hotel, between October 10, 1994, and June 30, 1998. Eighty percent had a diagnosis of dual psychiatric and substance use disorders. Administrative data from the city's public health system were used to construct a retrospective, longitudinal history of service use. Analyses compared service use during the two years before entry into supportive housing with service use during the two years after entry. Eighty-one percent of residents remained in permanent supportive housing for at least one year. Housing placement significantly reduced the percentage of residents with an emergency department visit (53 to 37 percent), the average number of visits per person (1.94 to .86), and the total number of emergency department visits (56 percent decrease, from 457 to 202) for the sample as a whole. For hospitalizations, permanent supportive housing placement significantly reduced the likelihood of being hospitalized (19 to 11 percent) and the mean number of admissions per person (.34 to .19 admissions per resident). Providing permanent supportive housing to homeless people with psychiatric and substance use disorders reduced their use of costly hospital emergency department and inpatient services, which are publicly provided.

Title: Housing Outcomes for Hospitalized Homeless Veterans

Authors: Greenberg GA, Hoblyn J, Seibyl C, Rosenheck RA

Source: Journal of Health Care for the Poor and Underserved, 17(2):425-440, May 2006.

Summary: This study examines housing status at the time of hospital discharge in a national sample of 3,502 veterans who were homeless at admission to a Veterans Health Administration (VHA) medical center. A supplemental survey on homelessness was added to the annual VHA inpatient census over a 4-year period (1995 through 1998). Data from this survey were used to identify homeless veterans hospitalized on the final day of the fiscal year and to document their housing status at discharge. A signal detection technique, Receiver Operating Characteristic analysis, was used to identify predictors of housing status at discharge. At discharge, only 13% of the veterans in our analytic sample were literally homeless, 40% were doubled up, and 33% were transferred to another institution; only 13% were living independently. Housing status at admission (specifically, staying with friends or family temporarily rather than literally homeless), treatment in a psychiatric or substance abuse program rather than a medical program, and a greater income level or access to VHA benefits were found to be associated with better housing outcomes. As one might expect, homelessness was infrequently resolved during an acute inpatient hospitalization, but few veterans returned to literal homelessness at the time of discharge.

Title: Intervention Effects of Supplying Homeless Individuals with Permanent Housing: a 3-year Prospective Study

Authors: Fichter MM, Quadflieg N

Source: Acta Psychiatrica Scandinavica, 113:36-40, 2006.

Summary: The objective of this study was to describe the intervention effects of supplying homeless individuals with permanent housing. Method: In a prospective study, 109 male and 20 female homeless individuals were assessed at baseline and at 1- and 3-year follow-up concerning mental illness (SCID-1), psychopathology, global assessment of functioning, emotional lability and alcohol consumption. Results: A high proportion (86%) of the individuals was able to maintain or improve stability of housing. Only minor changes were observed concerning mental illness and global functioning. Extensive alcohol consumption and high psychopathology increased the risk of losing the stable housing. Conclusion: The placement of homeless individuals in board and care homes or community housing after social counselling seems to be a necessary measure to remedy homelessness. However, supplying more permanent housing is not sufficient to decisively improve mental health status.

Title: Public Health Care Utilization in a Cohort of Homeless Adult Applicants to a Supportive Housing Program

Authors: Kessel ER, Bhatia R, Bamberger JD, Kushel MB

Source: Journal of Urban Health, June 16, 2006 (E-publication ahead of print)

Summary: Supportive housing is subsidized housing with on-site or closely linked services for chronically homeless persons. Most literature describing the effects of supportive housing on health service utilization does not describe use across multiple domains

of services. We conducted a retrospective cohort study of 249 applicants to a supportive housing program; 114 (45.7%) were housed in the program. We describe the pattern of service use across multiple domains (housing, physical health care, mental health care, substance abuse treatment). We examine whether enrollment in supportive housing was associated with decreased use of acute health services (emergency department (ED) and inpatient medical hospitalizations) and increased use of ambulatory services (ambulatory medical and generalist care, mental health, and substance abuse treatment) as compared to those eligible but not enrolled. Participants in both groups exhibited high rates of service utilization. We did not find a difference in change in utilization patterns between the two groups [those that received housing (intervention) and those that applied, were eligible, but did not establish residency (usual care group)] comparing the two years prior to the intervention to the two years after. The finding of high rates of maintenance of housing is, in itself, noteworthy. The consistently high use of services across multiple domains and across multiple years speaks to the level of infirmity of this population and the costs of caring for its members.

AGING HOMELESS POPULATION

Title: The Aging of the Homeless Population: Fourteen-Year Trends in San Francisco

Authors: Hahn JA, Kushel MB, Bangsberg DR, Riley E, Moss AR

Source: Journal of General Internal Medicine, 21(7):775-778, July 2006.

Summary: Homelessness is associated with high rates of health and substance use problems. To examine trends in the age, housing, health status, health service utilization, and drug use of the homeless population over a 14-year period. We studied 3,534 literally homeless adults recruited at service providers in San Francisco in 4 waves: 1990-1994, 1996-1998, 1999-2000, and 2003. The median age of the homeless increased from 37 to 46 over the study waves, at a rate of 0.66 years per calendar year. The median total time homeless increased from 12 to 39.5 months. Emergency department visits, hospital admissions, and chronic health conditions increased. The homeless population is aging by about two thirds of a year every calendar year, consistent with trends in several other cities. It is likely that the homeless are static, aging population cohort. The aging trends suggest that chronic conditions will become increasingly prominent for homeless health services. This will present challenges to traditional approaches to screening, prevention, and treatment of chronic diseases in an aging homeless population.

YOUTH AND YOUNG ADULTS

Title: Perspectives and Experiences of Homeless Young People

Author: Ensign, BJ

Source: Journal of Advanced Nursing, 54(6):647-652, June 2006.

Summary: This paper reports a study describing the experiences and perspectives of homeless young people as research participants. Worldwide, homeless young people are an especially vulnerable group due to their age, socio-economic disadvantage, and stigmatized status, and can suffer from human rights abuses. Researchers and advocates have noted that we know relatively little

about the effects of research participation on adolescents in general, and much less about marginalized adolescents such as homeless young people; nor do we know about their perceptions and experiences as research participants. There is a lack of studies reported to help guide the ethical conduct of research with homeless young people. For this study, individual interviews with 30 street and clinic-based homeless young people aged 15-23 years and two focus groups with a total of 13 additional homeless young people were conducted in a large West-coast city in the United States of America. The study took place between January and June 2003. Interviews and focus groups were tape-recorded, transcribed, preliminarily coded, with final coding crosschecked and verified with a second researcher. The majority of young people reported positive experiences as research participants in the past. None reported coercive research experiences; however, many stated that they would have liked more information about how the data they provided would be used by the researchers. All participants reported that it was important to be provided with research incentives, and thought that small monetary or pre-paid phone cards were appropriate incentives. They did express concerns that larger research incentives could be coercive and harmful for some homeless young people. Researchers working with homeless young people should seek greater input from them on the overall design of the study, especially concerning the appropriate use of research incentives.

Title: Gender Differences in Victimized Homeless Adolescents

Authors: Johnson RJ, Rew L, Kouzekanani K

Source: Adolescence, 41(161):39-53, Spring 2006.

Summary: Most of what we know about sexual abuse comes from efforts to examine female children victimized by men. Although some researchers have identified similarities between male and female victims of sexual abuse, few studies have examined gender-specific factors associated with sexual health practices among homeless adolescents. The aim of this study was to explore how gender and history of sexual abuse influence cognitive-perceptual and behavioral factors associated with sexual health practices of homeless adolescents. This study was a secondary analysis of data collected for a cross-sectional study of the sexual health practices of homeless adolescents. The sample consisted of 414 youths (104 males who reported sexual abuse and 124 who did not; and 95 females who reported sexual abuse and 75 who did not; 16 did not provide these data). Homeless adolescent females with a history of sexual abuse scored higher (indicating a shorter perspective) on a measure of future time perspective than females with no sexual abuse. Males who reported no sexual abuse scored higher than abused females on perceived health status and higher than abused males on assertive communication. With respect to perceived health status, males who reported no sexual abuse scored significantly higher than females who reported sexual abuse. Males with no sexual abuse had significantly higher assertive communication scores than did males who had experienced sexual abuse. We found that male and female abuse victims differ in terms of their cognitive-perceptual and behavioral factors associated with sexual health practices. Early identification of those who have been abused is critical so that interventions can be developed.

Effective short-term interventions are needed for the adolescent victims of Child Sexual Abuse (CSA), particularly those who are homeless and prone to further sexual victimization.

Title: Victimization and Health Among Indigent Young Women in the Transition to Adulthood: A Portrait of Need

Authors: Wenzel SL, Hambarsoomian K, D'Amico EJ, Ellison M, Tucker JS

Source: Journal of Adolescent Health, 38(5):536-543, May 2006.

Summary: This study attempts to understand victimization by physical and sexual violence and its association with physical and behavioral health in a probability sample of sheltered homeless and low-income-housed young women in the transition to adulthood (ages 18 through 25). Participants were 224 women ages 18 through 25 who were selected by means of a stratified random sample from 51 temporary shelter facilities (N = 94) and 66 Section 8 private project-based Housing and Urban Development (HUD)-subsidized apartment buildings (N = 130) in Los Angeles County, California. Women completed structured interviews. Forty-one percent of the sample had been physically or sexually victimized as children and 51% had been victimized since turning 18. Young women who experienced victimization were significantly more likely than non-victimized women to have a sexually-transmitted disease (STD) other than HIV/AIDS or Hepatitis B or C, vaginal discharge or bleeding and pelvic pain in the past 6 months, and past-12 month screening diagnoses of drug abuse/dependence and depression. Victimized women were also significantly more likely to use alcohol to intoxication and drugs, including crack and amphetamines, during the past 6 months, and to have experienced psychological distress and poor self-esteem. This study highlights striking rates of victimization and its association with physical and behavioral health problems among indigent young women during the period of emerging adulthood. This portrait of need communicates an urgency to develop multifaceted programs for such women to help them successfully navigate the transition to adulthood and realize their full potential as adults.

Title: Service Utilization and the Life Cycle of Youth Homelessness

Authors: Carlson JL, Sugano E, Millstein SG, Auerswald CL

Source: Journal of Adolescent Health, 38(5):624-627, May 2006.

Summary: The study sought to describe service utilization patterns of homeless youth based on their life cycle stage. Ninety-nine percent of participants accessed services. Medical service utilization was highest among youth who were attempting to leave the street. Drug-related service utilization was lowest among youth most entrenched in street life.

Title: Understanding Runaway Teens

Author: Martinez RJ

Source: Journal of Child and Adolescent Psychiatric Nursing, 19(2):77-88, May 2006.

Summary: Large numbers of teenagers become "runaways" and put themselves at risk for physical and emotional harm. During the year 2002, an estimated 1.6 million U.S. youth aged 12 to 17 had run away from home and slept on the streets. A qualitative ex-

ploratory method was used to study a sample of primarily ethnic minority youth found in a Midwestern inner city detention center. This study examined run behavior from the teenager's own perspective to identify why they ran, how they kept themselves safe, and what factors contributed to ending a run. Teens ran to gain control of their lives by changing their situation. They developed new affiliations to meet safety and sustenance needs and learned from experience that one cannot run from your problems. With experience, running became habitual. Safer alternatives are needed for youth who cannot live at home.

HAPPINESS AND WELL-BEING

Title: The Subjective Well-Being of the Homeless, and Lessons for Happiness

Authors: Biswas-Diener R, Diener E

Source: Social Indicators Research, 76(2):185-205, April 2006.

Summary: The current study assessed the subjective well-being of a broad spectrum of homeless people. One-hundred-and-eighty-six homeless people from the streets of Calcutta (India), California, and a tent camp in Portland (Oregon) were interviewed, and responded to measures of subjective well-being. They answered questions about life satisfaction, satisfaction with various life domains, and their experience of positive and negative emotions. The mean rating of life satisfaction was slightly negative for both American samples but positive for the pavement dwellers in Calcutta. Satisfaction with self-related domains was positive, whereas satisfaction with material related domains was generally negative. Satisfaction with social domains appears to be the area of largest variation among the groups. We discuss the importance of social factors and basic material needs as they relate to overall subjective well-being of the homeless.

DYSPEPSIA

Title: Dyspepsia in Homeless Adults

Authors: Hwang SW, Wong SYC, Bargh GJM

Source: Journal of Clinical Gastroenterology, 40(5):416-420, May-June 2006.

Summary: The goals of this study were to determine the prevalence of and risk factors for dyspepsia in a representative sample of homeless persons using shelters in Toronto, Canada. Homeless people have many risk factors for dyspepsia, but little information is available on gastrointestinal symptoms in this population. This study was a cross-sectional survey of a representative sample of 100 homeless adults, with serologic testing for Helicobacter pylori infection. The prevalence of moderate, severe, or very severe symptoms within the past 3 months was 18% for upper stomach pain and 59% for any dyspeptic symptom. Nonwhite ethnicity and a history of gastrointestinal disease were significantly associated with moderate to very severe upper stomach pain. H. pylori infection was identified in 31% of participants but was not significantly associated with dyspepsia. Dyspepsia is a common problem among homeless adults in Toronto. The presence of upper stomach pain is most strongly associated with a history of gastrointestinal disease.

HEPATITIS C

Title: Hepatitis C Virus Infection Among Homeless Men Referred From a Community Clinic

Authors: Nyamathi AM, Dixon EL, Wiley D, Christiani A, Lowe A

Source: Western Journal of Nursing Research, 28(4):475-488, June 2006.

Summary: In this study of factors related to Hepatitis C virus (HCV) infection in 104 homeless HCV-infected men and 94 uninfected homeless men, findings reveal that homeless men with HCV infection are older and more likely to be cocaine injectors than those not infected. Moreover, the sharing of needles, use of injected cocaine during the past 6 months, previous incarceration, veteran status, fair or poor health, and having multiple tattoos are also associated with HCV infection. Reports of having completed the HBV vaccination series, weekly marijuana use, and snorting cocaine or methamphetamine are negatively associated with HCV infection. Among men not reporting lifetime injection drug use, factors such as sharing toothbrushes, having multiple tattoos, being in fair or poor health, and past incarceration are associated with HCV infection. These findings may need to be considered when making screening decisions and counseling homeless male patients about HCV.

FOOD INSECURITY

Title: Experiences of Food Insecurity Among Urban Soup Kitchen Consumers: Insights for Improving Nutrition and Well-Being

Authors: Wicks R, Trevena LJ, Quine S

Source: Journal of the American Dietetic Association, 106(6):921-924, June 2006.

Summary: Adequate nutrition is an essential determinant of health. Disadvantaged individuals within the cities of developed countries continue to have poor health, yet the role of food insecurity in such groups is poorly understood. This cross-sectional study describes such experiences among 22 randomly selected participants who participated in interviews at a charity-run soup kitchen in urban Sydney, Australia. Interviews explored four constructs of food insecurity (quantitative, qualitative, psychological, and social), identifying related barriers and coping strategies. Reliable access to food was limited. Low income; high rents; poor health; and addictions to cigarettes, alcohol, illicit drugs, and gambling were associated with dependence on charities. Poor dentition and lack of food storage and cooking facilities were important barriers to adequate nutrition. Meals were missed and quantities restricted as a coping strategy. Participants demonstrated adequate knowledge and a desire to eat healthful food. Opportunities for social interaction and trust in soup kitchen staff were important motivators of attendance. Strategies to reduce food insecurity among seriously disadvantaged city dwellers should focus less on education and more on practical solutions, such as accessing affordable healthful food for those without kitchen facilities, improving dentition, and reducing addictions. It is also important to facilitate social networks with trusted support organizations.

SMOKING CESSATION

Title: Homelessness and Smoking Cessation: Insights from Focus Groups

Authors: Okuyemi KS, Caldwell AR, Thomas JL, Born W, Richter KP, Nollen N, Braunstein K, Ahluwalia JS

Source: Nicotine and Tobacco Research, 8(2): 287-296, April 2006.

Summary: Smoking prevalence among homeless persons is approximately 70%, yet little is known about tobacco use patterns or smoking cessation practices in this population. We assessed smoking attitudes and behaviors, psychosocial and environmental influences on smoking, barriers to and interest in quitting, and preferred methods for cessation among some homeless smokers. Six 90-min focus groups of current smokers (N=62) were conducted at homeless service facilities. Participants had a mean age of 41.5 years, were predominantly male (69.4%) and African American (59%), and smoked an average of 18.3 cigarettes/day. Although most reported that they were motivated to quit, a number of barriers to quitting were identified. Participants reported that the pervasiveness and social acceptance of tobacco use in homeless settings contributed to smoking more cigarettes per day, adopting alternative smoking behaviors such as smoking cigarette butts and making their own cigarettes, and experiencing difficulty in quitting. High levels of boredom and stress also were cited as reasons for continued smoking. Smoking frequently occurred in combination with alcohol or illicit drug use or to achieve a substitute "high." Most participants (76%) reported that they planned to quit smoking in the next 6 months. Many were interested in using pharmacotherapy in combination with behavioral treatments. Results suggest that, although motivated to quit smoking, homeless smokers are faced with unique social and environmental barriers that make quitting more difficult. Interventions must be flexible and innovative to address the unique needs of homeless smokers. Smoking restrictions at homeless service facilities and funding for smoking cessation assistance in this underserved population may help to reduce prevalence.

REVIEW OF EFFECTIVE INTERVENTIONS

Title: How Can Health Services Effectively Meet the Health Needs of Homeless People?

Authors: Wright NMJ, Tompkins CNE

Source: British Journal of General Practice, 56(525):286-293, Apr 2006.

Summary: Homelessness affects many people in contemporary society with consequences for individuals and the wider community. Homeless people experience poorer levels of general physical and mental health than the general population and there is a substantial international evidence base which documents multiple morbidity. Despite this, they often have problems in obtaining suitable health care. This study aimed to critically examine the international literature pertaining to the health care of homeless people and discuss the effectiveness of treatment interventions. The design of the study was a review and synthesis of current evidence. Medline (1966-2003), EMBASE (1980-2003), PsycINFO (1985-2003), CINAHL (1982-2003), Web of Science (1981-2003) and the Cochrane Library (Evidence Based Health) databases were

reviewed using key terms relating to homelessness, intervention studies, drug misuse, alcohol misuse and mental health. The review was not limited to publications in English. It included searching the internet using key terms, and grey literature was also accessed through discussion with experts. Internationally, there are differing models and services aimed at providing health care for homeless people. Effective interventions for drug dependence include adequate oral opiate maintenance therapy, hepatitis A, B and tetanus immunisation, safer injecting advice and access to needle exchange programmes. There is emerging evidence for the effectiveness of supervised injecting rooms for homeless injecting drug users and for the peer distribution of take home naloxone in reducing drug-related deaths. There is some evidence that assertive outreach programmes for those with mental ill health, supportive programmes to aid those with motivation to address alcohol dependence and informal programmes to promote sexual health can lead to lasting health gain. As multiple morbidity is common among homeless people, accessible and available primary health care is a pre-requisite for effective health interventions. This requires addressing barriers to provision and multi-agency working so that homeless people can access the full range of health and social care services. There are examples of best practice in the treatment and retention of homeless people in health and social care and such models can inform future provision.

Title: Homelessness and Drug Use – A Narrative Systematic Review of Interventions to Promote Sexual Health

Authors: Wright NM, Walker J

Source: AIDS Care, 18(5):467-478, July 2006.

Summary: The objective of this research project was to examine the effectiveness of sexual health promotion interventions in homeless drug using populations. The following databases were searched: Medline (1966 to 2003), EMBASE (1980 to 2003), psycinfo (1985 to 2003), CINAHL (1982 to 2003), web of Science (1981 to 2003) and the Cochrane Library (Evidence Based health). Two independent researchers selected studies for inclusion. Inclusion criteria covered longitudinal studies using comparative statistics examining interventions to promote sexual health amongst homeless drug users. Studies excluding drug users from the study sample or where no mention was made of housing status were excluded. A narrative analysis of the papers was adopted to elicit common themes emerging from the studies. Of 99 papers identified, only 6 fulfilled the inclusion criteria. Interventions which seek to effect attitudinal and behavioural change through interactive methods such as role-play, video games and group work led to a self-reported reduction in both risk from drugs and sexual activity. The evidence for maintenance of risk reduction over one year remains unclear. Interventions do not appear to promote risky sexual activity in previously sexually inactive participants.

RESEARCH METHODOLOGY

Title: A Comparison of Agency-Based and Self-Report Methods of Measuring Services Across an Urban Environment by a Drug-Abusing Homeless Population

Authors: Pollio DE, North CS, Eyrich KM, Foster DA, Spitznagel EL

Source: International Journal of Methods in Psychiatric Research, 15(1):46-56, March 2006.

Summary: The purpose of this paper is to advance the methodology for studying service assessment by comparing self-report and agency-generated methods. This study compares 30-day self-reported service use for homeless individuals (N = 229) randomly recruited from a single urban environment (St Louis, Missouri) with similar data collected from a broad array of service agencies providing homeless, substance abuse and outpatient mental health services across the same environment. Comparisons were made between self-report and agency-based data on shelter use, outpatient mental health service use (case management, psychiatric treatment, group therapy), outpatient substance abuse service use (case management, counselling, group therapy) and drop-in/day treatment use. Consistently low levels of kappa scores (all under 0.4) and correlation coefficients (Only shelter use demonstrated significant agreement) were found. Findings demonstrated that the two methods of collecting service data are generally not concordant at the individual level. Certain demographic characteristics (increased age, being male, non-white ethnicity) and diagnoses (cocaine abuse/dependence, mania, schizophrenia) were associated with decreased reliability between the two methods of data collection. The two methods of assessment appeared to capture overlapping but not identical information. Each method of assessment has different utility to researchers and providers wishing to assess service use.

MENTAL ILLNESS

Title: The Struggle to Provide Community-Based Care to Low-Income People with Serious Mental Illness

Authors: Cunningham P, McKenzie K, Taylor EF

Source: Health Affairs, 25(3):694-705, May-June 2006.

Summary: This paper describes gaps in services for low-income people with serious mental illnesses as reported by mental health professionals and other observers in twelve U.S. communities. According to respondents, service gaps have grown in recent years especially for uninsured people as a result of state budget pressures and Medicaid cost containment policies. Growing service gaps contribute to the high prevalence of serious mental illness among the homeless and incarcerated populations, as well as crowding of emergency departments. Some states and communities are aggressively addressing these gaps, although funding for new programs remains scarce.

Title: History of Arrest, Incarceration and Victimization in Community-Based Severely Mentally Ill

Authors: White MC, Chafetz L, Collins-Bride G, Nickens J

Source: Journal of Community Health, 31(2):123-135, April 2006.

Summary: This study examined history of arrest and victimization in an urban community sample of severely mentally ill adults. Adults (n = 308) were consented and interviewed in one of four short-term residential treatment facilities in San Francisco. Nearly three quarters (71.4%) had been arrested at some time in their lives, 28.2% of whom had been arrested in the past 6 months. Substance use and homelessness were associated with history of arrest, while gender and ethnicity were not, although African

Americans were more likely to have spent longer time in jail or prison. One quarter (25.6%) reported victimization. Being female and homeless were associated with reporting victimization. Severe mental illness, in particular in combination with substance abuse and homelessness, is associated with higher prevalence of both arrest and victimization history. Healthcare providers should solicit histories to include these events in order to understand and provide optimal care and case management services.

Title: Therapeutic Relationships without Knowledge. An Anthropological Approach to the Encounter between Peer Workers and Homeless Persons with Psychiatric-Substance Use Co-Occurrence

Authors: Girard V, Driffin K, Musso S, Naudin J, Rowe M, Davidson L, Lovell AM

Source: *Evolution Psychiatrique*, 71(1):75-85, March 2006.

Summary: Data were gathered in the course of a one-year ethnographic study with a team of peer outreach workers, in the city of New Haven (U.S.A.). On the basis of this experience, we propose a phenomenological approach to the therapeutic relationship, by studying three types of relations linked to distinct roles (psychiatrist, anthropologist, peer worker) held when encountering persons who are homeless and ill. Because of the often-problematic interactions that homeless persons experience with institutions, the first problem faced in street work is to build a relationship of trust, which takes time and may be chaotic. Peer workers are familiar, from their personal experience, with the street context, the condition of homelessness and the experience of illness. This latter includes not only the fact of having been the object of psychiatric categorisation, but also the consequences; the interaction with institutions as a consumer; and especially the experience of an advanced process of recovery. Peer workers possess a unique skill that allows them to improve access to these persons. The question of the ideal therapeutic distance is revisited by these peers. To validate this experiential knowledge is to recognize both a unique form of cultural capital and health democracy.

Title: A Comparison of the Health and Mental Health Status of Homeless Mothers in Worcester, Mass: 1993 and 2003

Authors: Weinreb LF, Buckner JC, Williams V, Nicholson J

Source: *American Journal of Public Health*, June 29, 2006 (E-publication ahead of print.)

Summary: We assessed background characteristics, health status, and prevalence rates of mental health disorders in 2 studies of homeless mothers conducted in Worcester, Mass, one in 1993 and the other in 2003. We compared the women taking part in the 2 studies, which involved similar methodologies, on the key variables of interest over time. Homeless families taking part in the 2003 study were poorer than those taking part in the 1993 study, and female heads of household in that study reported more physical health limitations, major depressive illness, and post-traumatic stress disorder. Data from 2003 suggest that the characteristics of homeless mothers changed over the 10-year period assessed. Service providers and shelter staff may need to refine services so that they are responsive to these changing needs.

Title: Psychiatric Illness and Substance Abuse Among Homeless Asian-American Veterans

Authors: Lim S, Kaspro WJ, Rosenheck RA

Source: *Psychiatric Services*, 57(5):704-707, May 2006.

Summary: This study examined the proportion of Asian Americans among homeless veterans and among veterans in the general population to calculate the relative risk of homelessness among Asian-American veterans. It also examined differences in rates of psychiatric and substance use disorders between homeless racial and ethnic subgroups. Data were gathered between 1997 and 2001 from the Health Care for Homeless Veterans program and included data from administrative intake, patients' self-reports, and clinicians' diagnostic assessments of substance use disorders and psychiatric illness. Data were examined for 67,441 veterans. Asian-American veterans had a significantly lower risk of homelessness than veterans of other ethnic groups. Alcohol abuse was significantly and consistently less prevalent among Asian Americans compared with blacks and Hispanics. However, drug abuse was less prevalent among Asian Americans than among blacks and Hispanics, but rates were similar to those of whites. Lower rates of alcohol abuse may protect Asian-American veterans from becoming homeless.

PALLIATIVE CARE

Title: Shelter-based Palliative Care for the Homeless Terminally Ill

Authors: Podymow T, Turnbull J, Coyle D

Source: *Palliative Medicine*, 20(2):81-86, March 2006.

Summary: The homeless have high rates of mortality, but live in environments not conducive to terminal care. Traditional palliative care hospitals may be reluctant to accept such patients, due to behavior or lifestyle concerns. The Ottawa Inner City Health Project (OICHP) is a pilot study to improve health care delivery to homeless adults. This is a retrospective analysis of a cohort of terminally ill homeless individuals and the effectiveness of shelter-based palliative care. As proof of principle, a cost comparison was performed. 28 consecutive homeless terminally ill patients were admitted and died at a shelter-based palliative care hospice. Demographics, diagnoses at admission and course were recorded. Burden of illness was assessed by medical and psychiatric diagnoses, addictions, Karnofsky scale and symptom management. An expert panel was convened to identify alternate care locations. Using standard costing scales, direct versus alternate care costs were compared. 28 patients had a mean age 49 years; average length of stay 120 days. Diagnoses: liver disease 43%, HIV/AIDS 25%, malignancy 25% and other 8%. Addiction to drugs or alcohol and mental illness in 82% of patients. Karnofsky performance score mean 409 +/- 16.8. Pain management with continuous opiates in 71%. The majority reunited with family. Compared to alternate care locations, the hospice projected \$ 1.39 million savings for the patients described. The homeless terminally ill have a heavy burden of disease including physical illness, psychiatric conditions and addictions. Shelter-based palliative care can provide effective end-of-life care to terminally ill homeless individuals at potentially substantial cost savings.

HIV

Title: Case Management is Associated with Improved Antiretroviral Adherence and CD4+ Cell Counts in Homeless and Marginally Housed Individuals with HIV Infection

Authors: Kushel MB, Colfax G, Ragland K, Heineman A, Palacio H, Bangsberg DR

Source: Clinical Infectious Diseases, 43(2):234-242, July 2006.

Summary: Case management (CM) coordinates care for persons with complex health care needs. It is not known whether CM is effective at improving biological outcomes among homeless and marginally housed persons with human immunodeficiency virus (HIV) infection. Our goal was to determine whether CM is associated with reduced acute medical care use and improved biological outcomes in homeless and marginally housed persons with HIV infection. We conducted a prospective observational cohort study in a probability-based community sample of HIV-infected homeless and marginally housed adults in San Francisco, California. The primary independent variable was CM, defined as none or rare, moderate, or consistent. The dependent variables were 3 self-reported health service use measures and 2 biological measures. In multivariate models, CM was not associated with increased primary care, emergency department use, or hospitalization. Moderate CM, compared with no or rare CM, was associated with an adjusted beta coefficient of 0.13 for improved antiretroviral adherence. Consistent CM and moderate CM were both associated with $\geq 50\%$ improvements in CD4(+) cell count. CM was not associated with geometric HIV load < 400 copies/mL when antiretroviral therapy adherence was included in the model. CM may be a successful method to improve adherence to antiretroviral therapy and biological outcomes among HIV-infected homeless and marginally housed adults.

STUDENT-RUN FREE CLINIC

Title: Students in the community: An interprofessional student-run free clinic

Authors: Moskowitz D, Glasco J, Johnson B, Wang G

Source: Journal of Interprofessional Care, 20(3):254-9, June 2006.

Summary: Students in the Community (SITC) is an interprofessional collaboration of health science students at the University of Washington. SITC runs a weekly free clinic at the Aloha Inn, a transitional housing facility for 70 homeless men and women in downtown Seattle. The focus of this clinic is on health education, chronic disease management, and re-integration of patients into the healthcare infrastructure. SITC serves as a valuable service learning opportunity for students. In addition to direct clinical services, students gain experience in planning health education strategies, community collaboration, and evaluating intervention outcomes. SITC also oversees a lecture and discussion-based elective course at the University of Washington focused on health issues of the homeless community and provides formal teaching which complements the service-learning component of the endeavor.