Health Care for the Homeless

RESEARCH UPDATE

Volume XII, No. 4 January 2012

A publication of the National Health Care for the Homeless Council, Inc. This publication was supported by Grant/Cooperative Agreement Number U30CS09746-04-00 from the Health Resources and Services Administration, Bureau of Primary Health Care (HRSA/BPHC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of HRSA/BPHC.

Each quarter, research databases are searched for publications related to health care and homelessness. This issue of the **HCH RESEARCH UPDATE** *includes a sample of summaries resulting from the search of publications from (approximately) October 2011 – December 2011. Summaries are categorized into themes which vary each quarter.*

BARRIERS TO CARE

Title: **Barriers to Healthcare of Homeless Residents of Three Honolulu Shelters**
Authors: Hoshide RR, Manog JD, Noh T and Omori J
Source: Hawaii Med J, 70(10): 214-216, 2011
Summary: In Honolulu, health insurance rates amongst the homeless are one of the highest in the nation, yet significant health care needs are still unmet. In a previous model, health care barriers have been divided into four domains: bureaucratic, personal, programmatic, and financial. This study aimed to determine the risk factors associated with the domains of health care barriers amongst the study's sample of 128 subjects across three Honolulu homeless shelters. Univariate models revealed health care barriers; but only the lack of health insurance was a significant financial barrier to health care in multivariate analyses (Odds ratio: 2.12; 95% Confidence Interval: 1.09-4.16). The identification of barriers should guide how health care programs approach Honolulu's homeless population to better serve their health care needs.

CHILDREN & FAMILIES

Title: **Physical and Mental Health, Cognitive Development, and Health Care Use by Housing Status of Low-Income Young Children in 20 American Cities: A Prospective Cohort Study**
Authors: Park JM, Fertig AR and Allison PD
Source: Am J Public Health, 101(Suppl 1), S255-S261, 2011
Summary: OBJECTIVES: We assessed the independent effect of homeless and doubled-up episodes on physical and mental health, cognitive development, and health care use among children. METHODS: We used data from 4 waves of the Fragile Families and Child Wellbeing Study, involving a sample of 2631 low-income children in 20 large US cities who have been followed since birth. Multivariate analyses involved logistic regression using the hybrid method to include both fixed and random effects. RESULTS: Of the sample, 9.8% experienced homelessness and an additional 23.6% had a doubled-up episode. Housing status had little significant adverse effect on child physical or mental health, cognitive development, or health care use. CONCLUSIONS: Family and environmental stressors common to many children in poverty, rather than just homeless and doubled-up episodes, were associated with young children's poor health and cognitive development and high health care use. Practitioners need to identify and respond to parental and family needs for support services in addition to housing assistance to effectively improve the health and development of young children who experience residential instability, particularly those in homeless families.

COST EFFECTIVENESS

Title: **Comparative Cost Analysis of Housing and Case Management Program for Chronically Ill Homeless Adults Compared to Usual Care**
Authors: Basu A, Kee R, Buchanan D and Sadowski LS
Source: Health Serv Res, 2011 (Epub 2011 Nov 22)
Summary: OBJECTIVE: To assess the costs of a housing and case management program in a novel sample-homeless adults with chronic medical illnesses. DATA SOURCE: The study used data from multiple sources: (1) electronic medical records for hospital, emergency room, and ambulatory medical and mental health visits; (2) institutional and regional databases for days in respite centers, jails, or prisons; and (3) interviews for days in nursing homes, shelters, substance abuse treatment centers, and case manager visits. Total costs were estimated using unit costs for each service. STUDY DESIGN: Randomized controlled trial of 407 homeless adults with chronic medical illnesses enrolled at two hospitals in Chicago, Illinois, and followed for 18 months. PRINCIPAL FINDINGS: Compared to usual care, the intervention group generated an average annual cost savings of (-)$6,307 per person (95 percent CI: -16,616, 4,002; p = .23). Subgroup analyses of chronically homeless and those with HIV showed higher per person, annual cost savings of (-)$9,809 and

(-)$6,622, respectively. Results were robust to sensitivity analysis using unit costs. CONCLUSION: The findings of this comprehensive, comparative cost analyses demonstrated an important average annual savings, though in this underpowered study these savings did not achieve statistical significance.

Title: **Nurse-Led Homeless Intermediate Care: An Economic Evaluation**
Authors: Dorney-Smith S
Source: Br J Nurs, 20(18): 1193-1197, 2011
Summary: This article describes a homeless intermediate care pilot project that took place at a 120-bedded homeless hostel in South London in 2009. During the year, 34 hostel clients directly benefited from intermediate care. At the end of the year, the number of hospital admissions to the hostel had dropped 77% relative to 2008, and the number of accident and emergency (A&E) attendances had dropped 52%. Hospital 'did not attends' (DNAs) were 22% lower. An economic evaluation found that the pilot project was cost neutral overall, and there is some evidence that health outcomes improved. The project now has mainstream funding and has recently received a national community nursing award. Its success has been recognized nationally as an example of innovative practice in work with vulnerable groups (Department of Health (DH), 2010).

Title: **An Intervention to Improve Care and Reduce Costs for High-Risk Patients with Frequent Hospital Admissions: A Pilot Study**
Authors: Raven MC, Doran KM, Kostrowski S, Gillispie CC and Elbel BD
Source: BMC Health Serv Res, 11, 270, 2011
Summary: BACKGROUND: A small percentage of high-risk patients accounts for a large proportion of Medicaid spending in the United States, which has become an urgent policy issue. Our objective was to pilot a novel patient-centered intervention for high-risk patients with frequent hospital admissions to determine its potential to improve care and reduce costs. METHODS: Community and hospital-based care management and coordination intervention with pre-post analysis of health care utilization. We enrolled Medicaid fee-for-service patients aged 18-64 who were admitted to an urban public hospital and identified as being at high risk for hospital readmission by a validated predictive algorithm. Enrolled patients were evaluated using qualitative and quantitative interview techniques to identify needs such as transportation to/advocacy during medical appointments, mental health/substance use treatment, and home visits. A community housing partner initiated housing applications in-hospital for homeless patients. Care managers facilitated appropriate discharge plans then worked closely with patients in the community using a harm reduction approach. RESULTS: Nineteen patients were enrolled; all were male, 18/19 were substance users, and 17/19 were homeless. Patients had a total of 64 inpatient admissions in the 12 months before the intervention, versus 40 in the following 12 months, a 37.5% reduction. Most patients (73.3%) had fewer inpatient admissions in the year after the intervention compared to the prior year. Overall ED visits also decreased after study enrollment, while outpatient clinic visits increased. Yearly study hospital Medicaid reimbursements fell an average of $16,383 per patient. CONCLUSIONS: A pilot intervention for high-cost patients shows promising results for health services usage. We are currently expanding our model to serve more patients at additional hospitals to see if the pilot's success can be replicated. TRIAL REGISTRATION: Clinicaltrials.gov Identifier: NCT01292096.

HEALTH SERVICE NEEDS & UTILIZATION

Title: **Complex Health Service Needs for People who are Homeless**
Authors: Moore G, Manias E and Gerdtz MF
Source: Aust Health Rev, 35(4): 480-485, 2011
Summary: BACKGROUND: Homeless people face many challenges in accessing and utilising health services to obtain psychosocial supports offered in hospital and community settings. The complex nature of health issues is compounded by lack of accessibility to services and lack of appropriate and safe housing. OBJECTIVE: To examine the perceptions and experiences of homeless people in relation to their health service needs as well as those of service providers involved with their care. DESIGN: A purposive sampling approach was undertaken with a thematic framework analysis of semi-structured interviews. Participants. Interviews were undertaken with 20 homeless people who accessed the emergency department in an acute hospital in Melbourne, Australia and 27 service providers involved in hospital and community care. RESULTS: Six key themes were identified from interviews: complexity of care needs, respect for homeless people and co-workers, engagement as a key strategy in continued care, lack of after-hour services, lack of appropriate accommodation and complexity of services. CONCLUSIONS: Findings revealed the complex and diverse nature of health concerns in homeless people. The demand on hospital services continues to increase and unless government policies take into consideration the psychosocial demands of the communities most vulnerable people efforts to divert hospital demand will continue to fail.

Title: **Living Conditions, Ability to Seek Medical Treatment and Awareness of Health Conditions and Healthcare Options among Homeless Persons in Tokyo, Japan**
Authors: Ohtsu T, Toda R, Shiraishi T, Toyoda H, Toyozawa H, Kamioka Y, Ochiai H, Shimada N, Shirasawa T, Hoshino H and Kokaze A
Source: Acta Med Okayama, 65(6), 387-393, 2011
Summary: Empirical data indicative of the health conditions and medical needs of homeless persons are scarce in Japan. In this study, with the aim of contributing to the formulation of future healthcare strategies for the homeless, we conducted a self-administered questionnaire survey and interviews at a park in Shinjuku Ward, Tokyo, to clarify the living conditions of homeless persons and their health conditions and awareness about the availability of medical treatment. Responses from 55 homeless men were recorded (response rate:36.7%). With the exception of one person, none of them possessed a health

insurance certificate. Half of the respondents reported having a current income source, although their modal monthly income was 30,000 yen($1 was approximately 90 yen). The number of individuals who responded "yes" to the questions regarding "Consulting a doctor on the basis of someone's recommendation" and "Being aware of the location of the nearest hospital or clinic" was significantly higher among those who had someone to consult when they were ill than among those who did not (the odds ratios [95% confidence intervals] were 15.00 [3.05-93.57] and 11.45 [1.42-510.68], respectively). This showed that whether or not a homeless person had a person to consult might influence his healthcare-seeking behavior. When queried about the entity they consulted (multiple responses acceptable), respondents mentioned "life support organizations" (61.1%) and "public offices" (33.3%). Overall, 94.5% of the respondents were aware of swine flu (novel influenza A (H1N1)). Their main sources of information were newspapers and magazines. On the basis of these findings, with regard to the aim of formulating healthcare strategies for homeless persons, while life support organizations and public offices play significant roles as conduits to medical institutions, print media should be considered useful for communicating messages to homeless persons.

Title: **Disparities in Health Care Utilization among Urban Homeless in South Korea: A Cross-Sectional Study**
Authors: Yoon C, Ju YS and Kim CY
Source: J Prev Med Public Health, 44(6), 267-274, 2011
Summary: OBJECTIVES: We examined health care disparities in Korean urban homeless people and individual characteristics associated with the utilization of health care. METHODS: We selected a sample of 203 homeless individuals at streets, shelters, and drop-in centers in Seoul and Daejeon by a quota sampling method. We surveyed demographic information, information related to using health care, and health status with a questionnaire. Logistic regression analysis was adopted to identify factors associated with using health care and to reveal health care disparities within the Korean urban homeless population. RESULTS: Among 203 respondents, 89 reported that they had visited health care providers at least once in the past 6 months. Twenty persons (22.5%) in the group that used health care (n = 89) reported feeling discriminated against. After adjustment for age, sex, marital status, educational level, monthly income, perceived health status, Beck Depression Inventory score, homeless period, and other covariates, three factors were significantly associated with medical utilization: female sex (adjusted odds ratio [aOR, 15.95; 95% CI, 3.97 to 64.04], having three or more diseases (aOR, 24.58; 95% CI, 4.23 to 142.78), and non-street residency (aOR, 11.39; 95% CI, 3.58 to 36.24). CONCLUSIONS: Health care disparities in Seoul and Daejeon homeless exist in terms of the main place to stay, physical illnesses, and gender. Under the current homeless support system in South Korea, street homeless have poorer accessibility to health care versus non-street homeless. To provide equitable medical aid for homeless people, strategies to overcome barriers against health care for the street homeless are needed.

HOUSING

Title: **The At Home/Chez Soi Trial Protocol: A Pragmatic, Multi-Site, Randomised Controlled Trial of a Housing Intervention for Homeless Individuals with Mental Illness in Five Canadian Cities**
Authors: Goering PN, Streiner DL, Adair C, Aubry T, Barker J, Distasio, J, Hwang SW, Komaroff J, Latimer E, Somers J and Zabkiewicz DM
Source: BMJ Open, 1(2), e000323, 2011
Summary: Introduction Housing First is a complex housing and support intervention for homeless individuals with mental health problems. It has a sufficient knowledge base and interest to warrant a test of wide-scale implementation in various settings. This protocol describes the quantitative design of a Canadian five city, $110 million demonstration project and provides the rationale for key scientific decisions. Methods A pragmatic, mixed methods, multi-site field trial of the effectiveness of Housing First in Vancouver, Winnipeg, Toronto, Montreal and Moncton, is randomising approximately 2500 participants, stratified by high and moderate need levels, into intervention and treatment as usual groups. Quantitative outcome measures are being collected over a 2-year period and a qualitative process evaluation is being completed. Primary outcomes are housing stability, social functioning and, for the economic analyses, quality of life. Hierarchical linear modelling is the primary data analytic strategy. Ethics and dissemination Research ethics board approval has been obtained from 11 institutions and a safety and adverse events committee is in place. The results of the multi-site analyses of outcomes at 12 months and 2 years will be reported in a series of core scientific journal papers. Extensive knowledge exchange activities with non-academic audiences will occur throughout the duration of the project. Trial registration number This study has been registered with the International Standard Randomised Control Trial Number Register and assigned ISRCTN42520374.

Title: **The Health and Housing in Transition Study: A Longitudinal Study of the Health of Homeless and Vulnerably Housed Adults in Three Canadian Cities**
Authors: Hwang SW, Aubry T, Palepu A, Farrell S, Nisenbaum R, Hubley AM, Klodawsky F, Gogosis E, Hay E, Pidlubny S, Dowbor T and Chambers C
Source: Int J Public Health, 56(6), 609-623, 2011
Summary: OBJECTIVES: While substantial research has demonstrated the poor health status of homeless populations, the health status of vulnerably housed individuals is largely unknown. Furthermore, few longitudinal studies have assessed the impact of housing transitions on health. The health and housing in transition (HHiT) study is a prospective cohort study that aims to track the health and housing status of a representative sample of homeless and vulnerably housed single adults in three Canadian cities (Toronto, Ottawa, and Vancouver). This paper discusses the HHiT study methodological recruitment strategies and follow-up procedures, including a discussion of the limitations and challenges experienced to date. METHODS: Participants (n = 1,192) were randomly selected at shelters, meal programmes,

community health centres, drop-in centres, rooming houses, and single-room occupancy hotels from January to December 2009 and are being re-interviewed every 12 months for a 2-year period. RESULTS: At baseline, over 85% of participants reported having at least one chronic health condition, and over 50% reported being diagnosed with a mental health problem. CONCLUSIONS: Our findings suggest that, regardless of housing status, participants had extremely poor overall health.

Title: **Health Status, Quality of Life, Residential Stability, Substance Use, and Health Care Utilization among Adults Applying to a Supportive Housing Program**
Authors: Hwang SW, Gogosis E, Chambers C, Dunn JR, Hoch JS and Aubry T
Source: J Urban Health, 88(6), 1076-1090, 2011
Summary: Supportive housing, defined as subsidized housing in conjunction with site-based social services, may help improve the health and residential stability of highly disadvantaged individuals. This study examined changes in health status, quality of life, substance use, health care utilization, and residential stability among 112 homeless and vulnerably housed individuals who applied to a supportive housing program in Toronto, Canada, from December 2005 to June 2007. Follow-up interviews were conducted every 6 months for 18 months. Comparisons were made between individuals who were accepted into the program (intervention) and those who were wait-listed (usual care) using repeated-measures analyses. Individuals who were accepted into the housing program experienced significantly greater improvements in satisfaction with living situation compared with individuals in the usual care group (time, F other quality of life measures, health status, health care utilization, or substance use between the two groups over time. Significant improvement in residential stability occurred over time, independent of assigned housing group (time, F (3,3,261) = 9.96, p < 0.01; group x time, F (3,3,261) = 1.74, p = 0.17). The ability to examine the effects of supportive housing on homeless individuals was limited by the small number of participants who were literally homeless at baseline and by the large number of participants who gained stable housing during the study period regardless of their assigned housing status. Nonetheless, this study shows that highly disadvantaged individuals with a high prevalence of poor physical and mental health and substance use can achieve stable housing.

Title: **A Comparison of Treatment Outcomes Among Chronically Homelessness Adults Receiving Comprehensive Housing and Health Care Services versus Usual Local Care**
Authors: Mares AS and Rosenheck RA
Source: Adm Policy Ment Health, 38(6), 459-475, 2011
Summary: Service use and 2-year treatment outcomes were compared between chronically homelessness clients receiving comprehensive housing and healthcare services through the federal Collaborative Initiative on Chronic Homelessness (CICH) program (n = 281) a sample of similarly chronically homeless individuals receiving usual care (n = 104) in the same 5 communities. CICH clients were housed an average of 23 of 90 days (52%) more than comparison group subjects averaging over all assessments over a 2-year follow-up period. CICH clients were significantly more likely to report having a usual mental health/substance abuse treater (55% vs. 23%) or a primary case manager (26% vs. 9%) and to receive community case management visits (64% vs. 14%). They reported receiving more outpatient visits for medical (2.3 vs. 1.7), mental health (2.8 vs. 1.0), substance abuse treatment (6.4 vs. 3.6), and all healthcare services (11.6 vs. 6.1) than comparison subjects. Total quarterly healthcare costs were significantly higher for CICH clients than comparison subjects ($4,544 vs. $3,326) due to increased use of outpatient mental health and substance abuse services. Although CICH clients were also more likely to receive public assistance income (80% vs. 75%), and to have a mental health/substance provider at all, they expressed slightly less satisfaction with their primary mental health/substance abuse provider (satisfaction score of 5.0 vs. 5.4). No significant differences were found between the groups on measures of substance use, community adjustment, or health status. These findings suggest that access to a well funded, comprehensive array of permanent housing, intensive case management, and healthcare services is associated with improved housing outcomes, but not substance use, health status or community adjustment outcomes, among chronically homeless adults.

Title: **Inuit Housing and Homelessness: Results from the International Polar Year Inuit Health Survey 2007-2008**
Authors: Minich K, Saudny H, Lennie C, Wood M, Williamson-Bathory L, Cao Z and Egeland GM
Source: Int J Circumpoloar Health, 70(5), 520-531, 2011
Summary: Objectives. Evaluate housing characteristics across Inuit regions in Canada that participated in the 2007-2008 International Polar Year (IPY) Inuit Health Survey. Study design. A cross-sectional Inuit Health Survey. Methods. Housing characteristics were ascertained as part of the IPY Inuit Health Survey through interviews conducted in 33 coastal and 3 inland communities, representing all communities in the Inuvialuit Settlement Region (ISR) of NWT, Nunavut and Nunatsiavut of northern Labrador. Variable descriptive statistics were weighted and presented by region and by whether children were present or not in each household. Results. A total of 2,796 Inuit households were approached, of which 68% participated (n=1,901 households). In ISR and Nunavut, approximately 20% of homes provided shelter to the homeless compared to 12% in Nunatsiavut (p</=0.05). The prevalence of public housing and household crowding also varied by region, with Nunavut having a statistically significantly higher prevalence of crowding (30%) than Nunatsiavut (12%) and ISR (12%). Household crowding was more prevalent among homes with children. Overall, 40% of homes were in need of major repairs and problems with mould were reported in 20% of households. Conclusions. Adequate shelter is a basic human need and an essential foundation for thriving population health. The results indicate that improvements in housing indicators are needed. Of utmost concern is the high prevalence of overcrowding in Inuit homes with children, which poses potential consequences for children's health and well-being. Further, the high percentage of homes

providing shelter to the homeless suggests that hidden homelessness needs to be addressed by further research and program implementation.

INFECTIOUS DISEASES

Title: **Tuberculosis in Indigenous Peoples in the U.S., 2003-2008**
Authors: Bloss E, Holtz TH, Jereb J, Redd JT, Podewils LJ, Cheek JE and McCray E
Source: Public Health Rep, 126(5): 677-689, 2011
Summary: OBJECTIVES: We examined trends and epidemiology of tuberculosis (TB) across racial/ethnic groups to better understand TB disparities in the United States, with particular focus on American Indians/Alaska Natives (AI/ANs) and Native Hawaiians/other Pacific Islanders (NH/PIs). METHODS: We analyzed cases in the U.S. National Tuberculosis Surveillance System and calculated TB case rates among all racial/ethnic groups from 2003 to 2008. Socioeconomic and health indicators for counties in which TB cases were reported came from the Health Resources and Services Administration Area Resource File. RESULTS: Among the 82,836 TB cases, 914 (1.1%) were in AI/ANs and 362 (0.4%) were in NH/PIs. In 2008, TB case rates for AI/ANs and NH/PIs were 5.9 and 14.7 per 100,000 population, respectively, rates that were more than five and 13 times greater than for non-Hispanic white people (1.1 per 100,000 population). From 2003 to 2008, AI/ANs had the largest percentage decline in TB case rates (-27.4%) for any racial/ethnic group, but NH/PIs had the smallest percentage decline (-3.5%). AI/ANs were more likely than other racial/ethnic groups to be homeless, excessively use alcohol, receive totally directly observed therapy, and come from counties with a greater proportion of people living in poverty and without health insurance. A greater proportion of NH/PIs had extrapulmonary disease and came from counties with a higher proportion of people with a high school diploma. CONCLUSIONS: There is a need to develop flexible TB-control strategies that address the social determinants of health and that are tailored to the specific needs of AI/ANs and NH/PIs in the U.S.

Title: **Adherence to HIV Treatment and Care among Previously Homeless Jail Detainees**
Authors: Chen NE, Meyer JP, Avery AK, Draine J, Flanigan TP, Lincoln T, Spaulding AC, Springer SA and Altice FL
Source: AIDS Behav, 2011(Epub 2011 Nov 09)
Summary: HIV-infected persons entering the criminal justice system (CJS) often experience suboptimal healthcare system engagement and social instability, including homelessness. We evaluated surveys from a multisite study of 743 HIV-infected jail detainees prescribed or eligible for antiretroviral therapy (ART) to understand correlates of healthcare engagement prior to incarceration, focusing on differences by housing status. Dependent variables of healthcare engagement were: (1) having an HIV provider, (2) taking ART, and (3) being adherent (>/=95% of prescribed doses) to ART during the week before incarceration. Homeless subjects, compared to their housed counterparts, were significantly less likely to be engaged in healthcare using any measure. Despite Ryan White funding availability, insurance coverage remains insufficient among those entering jails, and having health insurance was the most significant factor correlated with having an HIV provider and taking ART. Individuals interfacing with the CJS, especially those unstably housed, need innovative interventions to facilitate healthcare access and retention.

Title: **The Effects of a Harm Reduction Housing Program on the Viral Loads of Homeless Individuals living with HIV/AIDS**
Authors: Hawk M and Davis D
Source: AIDS Care, 2011(Epub 2011 Nov 23)
Summary: Abstract Although the advent of highly active antiretroviral therapies has increased survival rates for many individuals living with HIV/AIDS, chronically homeless individuals with the disease continue to experience poor clinical outcomes and high mortality rates in comparison to the general population living with HIV. Housing as a structural intervention for homeless people living with HIV/AIDS has been shown both to be feasible and to improve access to care. However, few studies report the impact of accessing stable housing on residents' viral load counts, even though viral load has been accepted as the best predictor of clinical prognosis for over a decade. The Open Door is a nonprofit agency that utilizes a harm reduction, housing first model of care to improve clinical outcomes for homeless people living with HIV. This article describes the first study that utilizes viral load to assess the effectiveness of a housing first approach. During the study period, we found that 69% of residents of The Open Door achieved undetectable viral loads, which far exceeds adherence rates ranging from 13 to 32% that were found in other studies of similar vulnerable populations. This finding supports the feasibility of this approach and its potential impact on reducing HIV morbidity, mortality, and secondary transmission. Given that the majority of the residents were active substance users during the study period and achieved undetectable viral loads, our findings also substantiate other studies demonstrating that substance users are able to maintain clinical adherence.

Title: **Sticking To It: The Effect of Maximally Assisted Therapy on Antiretroviral Treatment Adherence Among Individuals Living with HIV who are Unstably Housed**
Authors: Parashar S, Palmer AK, O'Brien N, Chan K, Shen A, Coulter S, Montaner JS and Hogg RS
Source: AIDS Behav, 15(8), 1612-1622, 2011
Summary: Housing is a known determinant of health behaviors, which includes adherence to Antiretroviral Therapy (ART). Within the Longitudinal Investigations into Supportive and Ancillary Health Services (LISA) study, unstable housing is inversely associated with adherence. Several comprehensive adherence support services have emerged to improve adherence for unstably housed or otherwise vulnerable populations. The Maximally Assisted Therapy (MAT) program in Vancouver, British Columbia uses a multidisciplinary approach to support HIV-positive clients with a history of addictions or mental illness, many of whom also experience episodic homelessness. This study investigated the association between antiretroviral adherence and

use of support services, including the MAT program, amongst people living with HIV and AIDS who are unstably housed in the LISA sample. Of the 212 unstably housed participants, those who attended the MAT program were 4.76 times more likely to be >/=95% adherent (95% CI 1.72-13.13; P = 0.003) than those who did not. The findings suggest that in the absence of sustainable housing solutions, programs such as MAT play an important role in supporting treatment adherence in this population.

Title: **Position-Specific HIV Risk in a Large Network of Homeless Youths**
Authors: Rice E, Barman-Adhikari A, Milburn NG and Monro W
Source: Am J Public Health, 2011 (Epub 2011 Nov 19)
Summary: Objectives. We examined interconnections among runaway and homeless youths (RHYs) and how aggregated network structure position was associated with HIV risk in this population. Methods. We collected individual and social network data from 136 RHYs.On the basis of these data, we generated a sociomatrix, accomplished network visualization with a "spring embedder," and examined k-cores. We used multivariate logistic regression models to assess associations between peripheral and nonperipheral network position and recent unprotected sexual intercourse. Results. Small numbers of nominations at the individual level aggregated into a large social network with a visible core, periphery, and small clusters. Female youths were more likely to be in the core, as were youths who had been homeless for 2 years or more. Youths at the periphery were less likely to report unprotected intercourse and had been homeless for a shorter duration. Conclusions. HIV risk was a function of risk-taking youths' connections with one another and was associated with position in the overall network structure. Social network-based prevention programs, young women's housing and health programs, and housing-first programs for peripheral youths could be effective strategies for preventing HIV among this population. (Am J Public Health. Published online ahead of print November 17, 2011: e1-e7. doi:10.2105/AJPH.2011.300295).

Title: **Tuberculosis and Homelessness in Montreal: A Retrospective Cohort Study**
Authors: Tan de Bibiana J, Rossi C, Rivest Pm Zwerling A, Thibert L, McIntosh F, Behr MA, Menzies D and Schwarzman K
Source: BMC Public Health, 11: 833, 2011
Summary: ABSTRACT: BACKGROUND: Montreal is Canada's second-largest city, where mean annual tuberculosis (TB) incidence from 1996 to 2007 was 8.9/100,000. The objectives of this study were to describe the epidemiology of TB among homeless persons in Montreal and assess patterns of transmission and sharing of key locations. METHODS: We reviewed demographic, clinical, and microbiologic data for all active TB cases reported in Montreal from 1996 to 2007 and identified persons who were homeless in the year prior to TB diagnosis. We genotyped all available Mycobacterium tuberculosis isolates by IS6110 restriction fragment length polymorphism (IS6110-RFLP) and spoligotyping, and used a geographic information system to identify potential locations for transmission between persons with matching isolates. RESULTS: There were 20 cases of TB in homeless persons, out of 1823 total reported from 1996-2007. 17/20 were Canadian-born, including 5 Aboriginals. Homeless persons were more likely than non-homeless persons to have pulmonary TB (20/20), smear-positive disease (17/20, odds ratio (OR) = 5.7, 95% confidence interval (CI): 1.7-20), HIV co-infection (12/20, OR = 14, 95%CI: 4.8-40), and a history of substance use. The median duration from symptom onset to diagnosis was 61 days for homeless persons vs. 28 days for non-homeless persons (P = 0.022). Eleven homeless persons with TB belonged to genotype-defined clusters (OR = 5.4, 95%CI: 2.2-13), and ten potential locations for transmission were identified, including health care facilities, homeless shelters/drop-in centres, and an Aboriginal community centre. CONCLUSIONS: TB cases among homeless persons in Montreal raise concerns about delayed diagnosis and ongoing local transmission.

Title: **Behavioral Health and Social Normative Influence: Correlates of Concurrent Sexual Partnering among Heterosexually-Active Homeless Men**
Authors: Wenzel SL, Rhoades H, Hsu HT, Golinelli D, Tucker JS, Kennedy DP, Green HD and Ewing B
Source: AIDS Behav, 2011 (Epub 2011 Oct 18)
Summary: Sexual concurrency poses significant HIV/STI transmission risk. The correlates of concurrency have not been examined among homeless men. A representative sample of 305 heterosexually active homeless men utilizing meal programs in the Skid Row area of Los Angeles reported on their mental health, substance use, and social network characteristics. Nearly 40% of men reported concurrency with one of their four most recent sex partners. Results indicated that HIV seropositivity (OR = 4.39, CI: 1.10, 17.46; P = 0.04), PTSD (OR = 2.29, CI: 1.05, 5.01; P = 0.04), hard drug use (OR = 2.45, CI: 1.07, 5.58; P = 0.03), and the perception that network alters engage in risky sex (OR = 3.72, CI: 1.49, 9.30; P = 0.01) were associated with increased odds of concurrency. Programs aimed at reducing HIV/STI transmission in this vulnerable population must take into account the roles that behavioral health and social networks may play in sexual concurrency.

MENTAL HEALTH & SUBSTANCE ABUSE

Title: **Cognitive Interviewing Methods for Questionnaire Pre-Testing in Homeless Persons with Mental Disorders**
Authors: Adair CE, Holland AC, Patterson ML, Mason KS, Goering PN and Hwang SW
Source: J Urban Health, 2011 [Epub 2011 Nov 24]
Summary: In this study, cognitive interviewing methods were used to test targeted questionnaire items from a battery of quantitative instruments selected for a large multisite trial of supported housing interventions for homeless individuals with mental disorders. Most of the instruments had no published psychometrics in this population. Participants were 30 homeless adults with mental disorders (including substance use disorders) recruited from service agencies in Vancouver, Winnipeg, and Toronto, Canada. Six interviewers, trained in cognitive interviewing methods and using standard interview schedules,

conducted the interviews. Questions and, in some cases, instructions, for testing were selected from existing instruments according to a priori criteria. Items on physical and mental health status, housing quality and living situation, substance use, health and justice system service use, and community integration were tested. The focus of testing was on relevance, comprehension, and recall, and on sensitivity/acceptability for this population. Findings were collated across items by site and conclusions validated by interviewers. There was both variation and similarity of responses for identified topics of interest. With respect to relevance, many items on the questionnaires were not applicable to homeless people. Comprehension varied considerably; thus, both checks on understanding and methods to assist comprehension and recall are recommended, particularly for participants with acute symptoms of mental illness and those with cognitive impairment. The acceptability of items ranged widely across the sample, but findings were consistent with previous literature, which indicates that "how you ask" is as important as "what you ask." Cognitive interviewing methods worked well and elicited information crucial to effective measurement in this unique population. Pretesting study instruments, including standard instruments, for use in special populations such as homeless individuals with mental disorders is important for training interviewers and improving measurement, as well as interpreting findings.

Title: **Psychiatric Pharmacist and Primary Care Collaboration at a Skid-Row safety-net clinic**
Authors: Chung B, Dopheide JA and Gregerson P
Source: J Natl Med Assoc, 103(7): 567-574, 2011
Summary: PURPOSE: There is limited access to psychiatric medication follow-up services at safety-net clinics serving the largely homeless minority population of Los Angeles' skid-row district. This paper describes the process of establishing a pharmacist-run psychiatric medication management service, the types of interventions provided by the psychiatric pharmacist, and patient and provider satisfaction with the service. METHODS: The establishment of a collaborative practice agreement between primary care physicians and psychiatric pharmacists is described along with the patient demographics and types of pharmacist interventions. Primary care physicians were surveyed regarding their comfort level with managing psychiatric illness and prescribing psychotropic medications. They were also asked about their opinion of psychiatric pharmacist medication management services. An anonymous patient satisfaction survey was also administered. RESULTS: The development of psychiatric pharmacy services is described. The types of interventions included initiating drug therapy, adjusting dosages, discontinuing drug therapy, and providing medication education. Primary care providers were not comfortable in providing psychiatric medication follow-up for patients beyond uncomplicated depression and anxiety disorders. They expressed an overall positive view of psychiatric pharmacist services for their patients with established psychiatric diagnoses. Patient satisfaction ratings were high. CONCLUSIONS: A psychiatric pharmacist-run medication management service in collaboration with primary care providers can improve access to mental health services in safety-net clinics with good provider and patient satisfaction.

Title: **Designing a Smoking Cessation Intervention for the Unique Needs of Homeless Persons: A Community-Based Randomized Clinical Trial**
Authors: Goldade K, Whembolua GL, Thomas J, Eischen S, Guo H, Connett J, Des Jarlais D, Resnicow K, Gelberg L, Owen G, Grant J, Ahluwalia JS and Okuyemi KS
Source: Clin Trials, 8(6): 744-754, 2011
Summary: BACKGROUND: Although smoking prevalence remains strikingly high in homeless populations (~70% and three times the US national average), smoking cessation studies usually exclude homeless persons. Novel evidence-based interventions are needed for this high-risk subpopulation of smokers. PURPOSE: To describe the aims and design of a first-ever smoking cessation clinical trial in the homeless population. The study was a two-group randomized community-based trial that enrolled participants (n = 430) residing across eight homeless shelters and transitional housing units in Minnesota. The study objective was to test the efficacy of motivational interviewing (MI) for enhancing adherence to nicotine replacement therapy (NRT; nicotine patch) and smoking cessation outcomes. METHODS: Participants were randomized to one of the two groups: active (8 weeks of NRT + 6 sessions of MI) or control (NRT + standard care). Participants attended six in-person assessment sessions and eight retention visits at a location of their choice over 6 months. Nicotine patch in 2-week doses was administered at four visits over the first 8 weeks of the 26-week trial. The primary outcome was cotinine-verified 7-day point-prevalence abstinence at 6 months. Secondary outcomes included adherence to nicotine patch assessed through direct observation and patch counts. Other outcomes included the mediating and/or moderating effects of comorbid psychiatric and substance abuse disorders. RESULTS: improving recruitment and retention in a mobile and vulnerable population included: (1) the importance of engaging the perspectives of shelter leadership by forming and convening a Community Advisory Board; (2) locating the study at the shelters for more visibility and easier access for participants; (3) minimizing exclusion criteria to allow enrollment of participants with stable psychiatric comorbid conditions; (4) delaying the baseline visit from the eligibility visit by a week to protect against attrition; and (5) regular and persistent calls to remind participants of upcoming appointments using cell phones and shelter-specific channels of communication. LIMITATIONS: The study's limitations include generalizability due to the sample drawn from a single Midwestern city in the United States. Since inclusion criteria encompassed willingness to use NRT patch, all participants were motivated and were ready to quit smoking at the time of enrollment in the study. Findings from the self-select group will be generalizable only to those motivated and ready to quit smoking. High incentives may limit the degree to which the intervention is replicable. CONCLUSIONS: Lessons learned reflect the need to engage communities in the design and implementation of community-based clinical trials with vulnerable populations.

Title: **Why are Some Patients Admitted to Psychiatric Hospital While Others are Not? A Study Assessing Risk during the Admission Interview and Relationship Outcome**
Authors: Hunt GE, O'Hara-Aarons M, O'Connor N and Cleary M
Source: Int J Ment Health Nurs, 2011 (Epub 2011 Nov 02)
Summary: The aim of this study was to determine what patient characteristics are used to decide whether a patient is or is not admitted to a psychiatric hospital, and what happens to those not admitted. A further aim was to determine if high levels of risk on admission predict seclusions, length of stay, or readmission within 28 days. Data were collected prospectively on consecutive presentations to an admission office via case notes and electronic databases. Eighty percent (100/127) of the adults presenting to the admission office over a typical month were admitted to hospital. Patients were more likely to be admitted if they were experiencing psychosis or exacerbation of schizophrenia, referred by other doctors or mental health teams, had a legal reason for referral, or if they were homeless. There was no association between risk for violence or suicide and seclusion rates, length of stay, or being readmitted within 28 days. It was reassuring to find that 85% of those not admitted were referred to other mental health providers, and none required admission over the following month. This study found high rates of seclusion and readmissions within 1 year, which requires further study to find strategies to reduce these rates.

Title: **A Randomized Clinical Trial of a Therapeutic Workplace for Chronically Unemployed, Homeless, Alcohol-Dependent Adults**
Authors: Koffarnus MN, Wong CJ, Diemer K, Needham M, Hampton J, Fingerhood M, Svikis DS, Bigelow GE and Silverman K
Source: Alcohol Alcohol, 46(5), 561-569, 2011
Summary: AIMS: To assess the efficacy of the Therapeutic Workplace, a substance abuse intervention that promotes abstinence while simultaneously addressing the issues of poverty and lack of job skills, in promoting abstinence from alcohol among homeless alcoholics. METHODS: Participants (n = 124) were randomly assigned to conditions either requiring abstinence from alcohol to engage in paid job skills training (Contingent Paid Training group), offering paid job skills training with no abstinence contingencies (Paid Training group) or offering unpaid job skill training with no abstinence contingencies (Unpaid Training group). RESULTS: Participants in the Contingent Paid Training group had significantly fewer positive (blood alcohol level >/= 0.004 g/dl) breath samples than the Paid Training group in both randomly scheduled breath samples collected in the community and breath samples collected during monthly assessments. The breath sample results from the Unpaid Training group were similar in absolute terms to the Contingent Paid Training group, which may have been influenced by a lower breath sample collection rate in this group and fewer reported drinks per day consumed at intake. CONCLUSION: Overall, the results support the utility of the Therapeutic Workplace intervention to promote abstinence from alcohol among homeless alcoholics, and support paid training as a way of increasing engagement in training programs.

Title: **Accessing a Diverse Sample of Injection Drug Users in San Francisco through Respondent-Driven Sampling**
Authors: Malekinejad M, McFarland W, Vaundrey J and Raymond HF
Source: Drug Alcohol Depend, 118(2-3), 83-91, 2011
Summary: AIMS: Injection drug users (IDU) are the second most affected population by HIV in San Francisco and the United Stated after men who have sex with men (MSM). Behavioral surveillance data that include the diversity of the population at risk are necessary to develop effective programs for IDU. DESIGN: We conducted a cross-sectional behavioral survey of IDU using respondent-driven sampling (RDS) in San Francisco. The present analysis focuses the performance of the sampling method in reaching the diversity of the population as a pre-requisite for representative data. PARTICIPANTS: Over 32 weeks, 571 eligible IDU were recruited, of whom 477 (83.5%) with complete records were included in analysis. FINDINGS: The age range was 18-70 years, with 36% age 50 years or older. The majority (56%) were homeless. Male, MSM, African-Americans and Non-Hispanic Whites comprised 71%, 28%, 36% and 35% of IDU, respectively. Twenty-two percent had "ever shared needles in the past 12 months," and 57% reported that they had "shared drugs" in the past 12 months. Peer referral chains were able to cross-recruit IDU by diverse demographic characteristics, drug use related behaviors, program access and use, and other factors relevant to reaching and conducting prevention research on this population. CONCLUSION: RDS appears to be an effective sampling tool that reaches diverse populations of IDU, including many who may be missed by drug treatment and HIV prevention services in San Francisco and potentially in other urban areas.

Title: **Addressing Tobacco Use in Homeless Populations: Recommendations of an Expert Panel**
Authors: Porter J, Houston L, Anderson RH and Maryman K
Source: Health Promot Pract, 12(6 Suppl 2), 144S-151S, 2011
Summary: A diverse group of panelists met for one day on October 21, 2009, in Washington, DC, for the purpose of addressing the high tobacco use prevalence rates in homeless populations; identifying appropriate policy, cessation practices and models for implementation in this population; and providing targeted recommendations for researchers, homeless service providers, tobacco control advocates, and policy makers. The panel was convened by Break Free Alliance, one of six national networks funded by the Centers for Disease Control and Prevention, Office on Smoking and Health. The panelists worked through a process of problem identification, generation of responses, analysis and prioritization, development of recommendations, and arrival of final decisions reached by consensus. The resulting recommendations for addressing tobacco use in homeless populations focused on tobacco non-use policy implementation, cessation programming, and expansion of partnerships and collaborations between tobacco control advocates and social service providers. The panel also identified unanswered research

questions that can serve to develop a framework for future initiatives to reduce tobacco use among homeless persons. The expert panel model serves as one approach for engaging nontraditional partners and building consensus among leaders from a variety of sectors to address tobacco use in special populations.

Title: **The Social Context of Homeless Men's Substance Use**
Authors: Rhoades H, Wenzel SL, Golinelli D, Tucker JS, Kennedy DP, Green HD and Zhou A
Source: Drug Alcohol Depend, 118(2-3): 320-325, 2011
Summary: BACKGROUND: Homeless men may be at particular risk for the negative health effects of substance use. This cross-sectional study investigates the individual and personal network risk factors associated with substance use in this vulnerable population. METHODS: Participants were a representative probability sample of 305 heterosexually active homeless men interviewed from meal programs in the Skid Row region of Los Angeles, CA. Interviews assessed individual, personal network, and substance use characteristics. Logistic regression examined individual and personal network predictors of the three most prevalent substances. RESULTS: In the past 6 months, the three most prevalent substances were marijuana (56%), crack (40%), and alcohol to intoxication (38%). The mental health status of homeless men was associated with substance use, with PTSD more common among those who used crack. Riskier networks (comprised of a larger proportion of drug users) were associated with marijuana use, and normative social ties (family, employed and school/work contacts) were associated with a decreased likelihood of crack use. CONCLUSIONS: Mental health problems and riskier personal networks are associated with homeless men's substance use. These findings underscore the importance of interventions that focus on improving mental health, mitigating the drug-using norms of personal networks, and helping men to maintain contact with normative, low-risk alters. Mental health care and peer-based, network interventions to reduce substance use should be a priority for heterosexually active homeless men.

Title: **Housing Status as an Independent Predictor of Functional Capacity in Patients with Schizophrenia**
Authors: Stergiopoulos V, Burra T, Rourke S and Hwang S
Source: J Nerv Ment Dis, 199(11): 854-860, 2011
Summary: This study compared the functional capacity and neurocognitive status of homeless and housed adults with schizophrenia or schizoaffective disorder and examined whether housing status is an independent predictor of functional capacity. We examined 30 homeless individuals and 21 housed controls and matched for diagnosis, sex, and age. The participants, recruited from an acute psychiatric inpatient unit, completed a measure of psychiatric symptom severity, a neuropsychological test battery, and a measure of functional capacity, the University of California-San Diego performance-based skills assessment (UPSA). There were no significant differences in performance on the neuropsychological test battery or the UPSA between housed and homeless participants. In a multivariate model, however, cognitive status and housing status were independent predictors of functional capacity, and homelessness was associated with an approximately 9-point lower score on the UPSA. This finding highlights the importance of neuropsychological screening and interventions that promote housing stability for patients with schizophrenia.

Title: **Substance Use and Predictors of Substance Dependence in Homeless Women**
Authors: Torchalla I, Strehlau V, Li K and Krausz M
Source: Drug Alcohol Depend, 118(2-3): 173-179, 2011
Summary: OBJECTIVE: To examine lifetime and current prevalence rates of substance use disorders and the demographic and clinical correlates of current drug dependence in a sample of homeless women. METHODS: A cross-sectional study of 196 homeless women in three Canadian cities was done. Each subject was assessed using structured clinical interviews. A multivariate regression model was applied to determine predictors of substance use. RESULTS: The mean age of the sample was 35.3 years, 54.4% identified as Aboriginal, 46.4% lived on the street Crack cocaine (58%) was the most common substance used, followed by alcohol (53%), cannabis (41%), and heroin (30%). Overall, 82.4% of the sample had at least one type of current substance use disorder, of which 70.5% had drug dependence and 37.8% had alcohol dependence. 58.3% had concurrent substance use and mental health disorders. 76.7% of those individuals with current alcohol dependence had concurrent drug dependence. Only 24.6% of those who had recovered from alcohol dependence had no current substance use disorder. Multivariate analyses showed that younger age, living on the street, engaging in sex work, and having ever attempted suicide were associated with current drug dependence. CONCLUSION: Prevalence rates for alcohol and especially drug dependence were exceptionally high in this sample. Innovative programs need to be developed which are accessible and tailored to meet the needs of this specific population, accounting for high problem severity, polysubstance dependence, and high rates of psychiatric comorbidity.

Title: **Smoking and Predictors of Nicotine Dependence in a Homeless Population**
Authors: Torchalla I, Strehlau V, Okoli CT, Li K, Schuetz C and Krausz M
Source: Nicotine Tob Res, 13(10): 934-942, 2011
Summary: OBJECTIVE: To assess prevalence rates of tobacco use and dependence in a sample of homeless individuals and to investigate trends for demographic and clinical characteristics across different levels of nicotine dependence (nonsmokers vs. lowly dependent smokers vs. highly dependent smokers). METHODS: A cross-sectional study of 489 homeless men and women in 3 Canadian cities. Each subject was assessed using structured clinical interviews and the Fagerstrom Test for Nicotine Dependence (FTND). Cochran-Armitage trend tests were applied to determine unadjusted trends in sociodemographic and clinical variables across levels of nicotine dependence. A generalized logit model was computed to adjust for potential confounding. RESULTS: The mean age was 37.9 years; 39.2% of the

participants were women. About 80.8% were current smokers; the mean FTND score was 5.0. Although no significant differences were found between nonsmokers and smokers with low nicotine dependence, smokers with high nicotine dependence were only half as likely as nonsmokers to be Aboriginal, were 2.39 times more likely to have ever been incarcerated, and 2.44 times more likely to have current drug dependence. There were significant trends for the use of cocaine, opioids, and alcohol, with nonsmokers having the lowest and highly dependent smokers having the highest rates of using these substances. CONCLUSIONS: Available public health smoking cessation treatment opportunities should be made available within health care services for the homeless. There is also a need for developing and implementing tobacco dependence treatment programs, which are accessible and tailored to meet the needs of this specific population, accounting for polysubstance use and concurrent substance dependence and mental health disorders.

METABOLIC SYNDROME

Title: **Prevalence of Metabolic Syndrome in a Predominantly Cuban, Psychiatrically Ill, and Homeless Population**
Authors: Rivas-Vasquez RA, Bello I, Sarria M, Fernandez ND and Rey GJ
Source: Prim Care Companion CNS Disord, 13(5), 2011
Summary: OBJECTIVE: This study examined the prevalence of metabolic syndrome among a group of psychiatric outpatients enrolled in a homeless program that is located in a predominantly Hispanic geographic area of South Florida. METHOD: Data for this retrospective, cross-sectional analysis were obtained from a record review of 122 adult patients who received full medical and psychiatric assessments based on DSM-IV criteria during participation in our homeless program from January 2009 to May 2009. The primary outcome measure was the presence of metabolic syndrome. RESULTS: The prevalence of metabolic syndrome within this population was 29.5%. Elevated waist circumference (48.5%) and elevated blood pressure (44.3%) were the 2 most frequent risk factors for the syndrome. Mean length of homelessness was 3.93 years, with no significant relationship noted between the presence of metabolic syndrome and duration of homelessness. Ninety-three percent of the subjects had been diagnosed with either schizophrenia or a mood disorder, and 61% had been treated with an atypical antipsychotic for at least 2 months over the preceding year. Our sample was predominantly Hispanic (79.5%), with Cuban Americans comprising 95% of that group. Among Hispanics, the prevalence rate of metabolic syndrome was 28.9%. CONCLUSIONS: Within our sample, homeless individuals compared to the general adult population in the United States seem to be at equal risk for metabolic syndrome. Although other studies have suggested an increased prevalence for metabolic syndrome among Hispanics, the obtained rate for our particular Hispanic sample was consistent with estimated prevalence of non-Hispanic individuals in the United States. Intervention programs rendering services to this population should include routine screening for presence of cardiovascular risk factors constituting metabolic syndrome.

MORTALITY

Title: **The Impact of Shelter Use and Housing Placement on Mortality Hazard for Unaccompanied Adults and Adults in Family Households Entering New York City Shelters: 1900-2002**
Authors: Metraux S, Eng N, Bainbridge J and Culhane DP
Source: J Urban Health, 88(6): 1091-1104, 2011
Summary: This study examines mortality among New York City (NYC) homeless shelter users, assessing the relationships between mortality hazard and time in shelter, patterns of homelessness, and subsequent housing exits for both adults in families and single adults. Administrative records from the NYC shelter system were matched with death records from the Social Security Administration for 160,525 persons. Crude mortality rates and life tables were calculated, and survival analyses were undertaken using these data. Life expectancy was 64.2 and 68.6 years for single adult males and single adult females, respectively, and among adults in families, life expectancy was 67.2 and 70.1 years for males and females, respectively. For both groups, exits to stable housing (subsidized or non-subsidized) were associated with reduced mortality hazard. And while mortality hazard was substantially reduced for the time adults were in shelters, extended shelter use patterns were associated with increased mortality hazard. Differences between single homelessness and family homelessness extend to disparities in mortality rates. Although causal links cannot be established here, results suggest that, for both subgroups of the homeless population, prompt resolution of homelessness and availability of housing interventions may contribute to reduced mortality.

SOCIAL INCLUSION THROUGH ART

Title: **Homeless Adults Engagement in Art: First Steps Towards Identity, Recovery and Social Inclusion**
Authors: Thomas Y, Gray M, McGinty S and Ebringer S
Source: Aust Occup Ther J, 58(6): 429-436, 2011
Summary: BACKGROUND: The Australian policy on homelessness identifies participation in structured activities as the first step towards social inclusion and increasing the likelihood of permanently leaving a homeless lifestyle. Art interventions increase interpersonal function and social participation and provide a means of expression and transformation with people who are homeless. AIM: This study explores the value of an art programme provided by a non-government agency for homeless adults. METHOD: Qualitative methods including participant observation and purposive interviews were analysed inductively and thematically to gain an understanding of the participants' experience of art and its value. Interviews with stakeholders provided additional information and triangulation of the data. RESULTS: The study demonstrates that art occupations provide a starting point for participation in community and a positive experience that encourages the construction of new identities, routines and roles. Furthermore, art provides an alternative from the problems associated with homelessness, mental health and substance abuse and allows for public recognition and social

inclusion. CONCLUSIONS: Health professionals should work towards the social inclusion of homeless people through providing occupational opportunities for participation in safe settings as a first step to community engagement.

STUDENT ATTITUDES

Title: **Transformative Learning through a Research Practicum for Undergraduate Nursing Students**
Authors: Kirkpatrick H, Tweedell D and Semogas D
Source: J Nurs Educ, 50(10), 595-598, 2011
Summary: In their final year of a Bachelor of Science in Nursing (BScN) program, students are required to take a research practicum related to clinical practice in a new or ongoing research project, supervised by nursing faculty. This course is designed to enhance students' understanding of the research process. The student's potential role as a research collaborator is emphasized. Involvement in an interdisciplinary narrative study with formerly homeless individuals challenged by severe alcohol dependence, in general poor health and living in a harm reduction environment, transformed students' values, assumptions, and beliefs. Not only did students gain confidence in their beginning skills as potential research collaborators, but they also felt that their future practice would be enhanced by new perspectives gained by studying a marginalized and stigmatized group, thus enabling them to appreciate cultural diversity and improve their competence.

VETERANS

Title: **Association of Substance Use and VA Service-Connected Disability Benefits with Risk of Homelessness among Veterans**
Authors: Edens EL, Kasprow W, Tsai J and Rosenheck RA
Source: Am J Addict, 20(5): 412-419, 2011
Summary: Recent public attention on homelessness has shifted beyond emergency services and supportive housing to primary prevention. This study compares a national sample of homeless and nonhomeless Veterans Affairs (VA) mental health services users to determine risk and protective factors for homelessness. Using VA administrative data, veterans were identified as homeless (ie, used VA homeless services or received a diagnostic code for "lack of housing") or nonhomeless and compared using logistic regression. Additional analyses were conducted for two low-risk subgroups: veterans who served in current Middle East wars (Operation Enduring Freedom [OEF]/Operation Iraqi Freedom [OIF]) and veterans with >/=50% service-connected disability. Among all VA mental health users, OEF/OIF (odds ratio [OR]) = 0.4) and >/=50% service-connected (OR = .3) veterans were less likely to be homeless. In the overall and subgroup analyses, illicit drug use (OR = 3.3-4.7) was by far the strongest predictor of homelessness, followed by pathological gambling (PG) (OR = 2.0-2.4), alcohol use disorder (OR = 1.8-2.0), and having a personality disorder (OR = 1.6-2.2). In both low-risk groups, severe mental illness (schizophrenia or bipolar disorder), along with substance use disorders, PG, and personality disorders, increased homelessness risk. Substance use, PG, and personality disorders confer the greatest modifiable risk of homelessness among veterans using VA services, while service-connected disability conferred reduced risk. Clinical prevention efforts could focus on these factors.

Title: **Residential Treatment for Homeless Female Veterans with Psychiatric and Substance Use Disorders: Effect on 1-Year Clinical Outcomes**
Authors: Harpaz-Rotem I, Rosenheck RA and Desai R
Source: J Rehabil Res Dev, 48(8): 891-899, 2011
Summary: Limited evidence shows that time-limited residential treatment (RT) is beneficial for homeless people with serious mental illness. The Department of Veterans Affairs has established 11 specialty programs for homeless female veterans. We present data comparing 1-year clinical outcomes in a group of veterans who did and did not receive at least 30 days of RT. Clients of the Homeless Women Veterans Programs were invited to participate in a follow-up study. They were interviewed every 3 months for 1 year. Those who received at least 30 days of RT in the 3 months after program entry (RT group) were compared with other program participants (no or <30 days RT [NRT] group) on measures of community functioning, psychiatric symptoms, and drug and alcohol use during the follow-up. The RT group had better outcomes on employment, social support, housing status, and psychiatric symptoms. They also had significantly increased use of drugs and alcohol compared with the NRT group. Data suggest that RT may have a beneficial effect on mental health outcomes in homeless women. This study, in conjunction with others, suggests that provision of stable housing may be an important element of recovery for homeless women with psychiatric problems, excluding substance use.

Title: **Building Care Systems to Improve Access for High-Risk and Vulnerable Veteran Populations**
Authors: O'Toole TP, Pirraglia PA, Dosa D, Bourgault C, Redihan S, O'Toole MB and Blumen J
Source: J Gen Intern Med, 26(Suppl 2), 683-688, 2011
Summary: BACKGROUND: For many high-risk patients, accessing primary care is challenged by competing needs and priorities, socioeconomics, and other circumstances. The resulting lack of treatment engagement makes these vulnerable patient populations susceptible to poor health outcomes and an over-reliance on emergency department-based care. METHODS: We describe a quasi-experimental pre-post study examining a vulnerable population-based application of the patient-centered medical home applied to four high-risk groups: homeless veterans, cognitively impaired elderly, women veterans and patients with serious mental illness. We measured 6-month primary care, emergency department and inpatient care use and chronic disease management when care was based in a general internal medicine clinic (2006) and in a population-specific medical home (2008). RESULTS: Overall 457 patients were studied, assessing care use and outcomes for the last 6 months in each study year. Compared with 2006, in 2008 there was a significant increase in primary care use ($p < 0.001$) and improvement in chronic disease monitoring and diabetes control (2006 HBA1C: 8.5 vs. 2008 HBA1C 6.9) in

all four groups. However, there was also an increase in both emergency department use and hospitalizations, albeit with shorter lengths of stay in 2008 compared with 2006. Most of the increased utilization was driven by a small proportion of patients in each group. CONCLUSION: Tailoring the medical home model to the specific needs and challenges facing high-risk populations can increase primary care utilization and improve chronic disease monitoring and diabetes management. More work is needed in directing this care model to reducing emergency department and inpatient use.

Title: **Requiring Sobriety at Program Entry: Impact on Outcomes in Supported Transitional Housing for Homeless Veterans**
Authors: Schinka JA, Casey RJ, Kasprow W and Rosenheck RA
Source: Psychiatr Serv, 62(11): 1325-1330, 2011
Summary: Objective: An important distinction in models of housing for the homeless is whether programs that require abstinence prior to program admission produce better outcomes than unrestricted programs. Data from a large transitional housing program were used to compare client characteristics of and outcomes from programs requiring abstinence at admission and programs not requiring abstinence. Methods: The U.S. Department of Veterans Affairs (VA) Northeast Program Evaluation Center provided records of individuals who were admitted into, and discharged from, the VA Grant and Per Diem program in 2003-2005. Records contained information from intake interviews, program discharge information, and descriptions of provider characteristics. Analyses were based on 3,188 veteran records, 1,250 from programs requiring sobriety at admission and 1,938 from programs without a sobriety requirement. Group differences were examined with t tests and chi square analyses; predictors of program outcome were determined with logistic regression. Results: Individuals using drugs or alcohol at program admission had more problematic histories, as indicated by several general health and mental health variables, and shorter program stays. There were significant differences between groups in the frequency of program completion, recidivism for homelessness, and employment on program discharge, but effect sizes for these analyses were uniformly small and of questionable importance. Regression analyses did not find meaningful support for the importance of sobriety on program entry on any of the outcome measures. Conclusions: The results add evidence to the small body of literature supporting the position that sobriety on program entry is not a critical variable in determining outcomes for individuals in transitional housing programs. (Psychiatric Services 62:1325-1330, 2011).

Title: **Niotine Dependence and its Risk Factors among Users of Veterans Health Services, 2008-2009**
Authors: Tsai J, Edens EL and Rosenheck RA
Source: Prev Chronic Dis, 8(6): A127, 2011
Summary: INTRODUCTION: Tobacco use is the leading preventable cause of death in the United States and is disproportionately higher among veterans than nonveterans. We examined the prevalence of nicotine dependence and its associated risk factors among veterans who used health services in the US Department of Veterans Affairs (VA) system. METHODS: Using a case-control design, we compared all VA health service users in fiscal year 2008-2009 (N = 5,031,381) who received a nicotine dependence diagnosis with those who did not. Independent risk and protective factors associated with receiving a nicotine dependence diagnosis were identified using logistic regression analysis. We conducted subgroup analyses on 2 groups of particular policy concern: homeless veterans and veterans who served in Iraq and Afghanistan. RESULTS: Among all recent VA health service users, 15% (n = 749,353) received a diagnosis of nicotine dependence. Substance abuse, other mental health diagnoses, and homelessness were identified as major risk factors. Veterans who served in Iraq and Afghanistan were not found to be at increased risk compared to veterans from other war eras. Major risk and protective factors within the subgroups of homeless veterans and veterans who served in Iraq and Afghanistan were broadly similar to those in the general VA population. CONCLUSION: Given that other studies have found higher rates of nicotine dependence among veterans, this risk behavior may be underdiagnosed in VA medical records. Veterans who are homeless or have mental health or substance abuse problems are at highest risk and should be targeted for smoking prevention and cessation interventions. These results support, in principle, efforts to integrate smoking cessation programs with mental health and homeless services.

WOMEN'S HEALTH

Title: **Mothers with Mental Illness Experiencing Homelessness: A Critical Analysis**
Authors: Benbow S, Forchuk C and Ray SL
Source: J Psychiatr Ment Health Nurs, 18(8): 687-695, 2011
Summary: The experiences of homeless mothers with mental illness were examined from the critical perspective of feminist intersectionality. The purpose of this study was to unveil experiences of oppression and resistance in the lives of homeless mothers with mental illness, while learning from them what is conducive to their health. A qualitative secondary analysis was done using focus group transcripts from a study examining issues related to diversity and homelessness for psychiatric survivors and a study on mental health and housing. A purposive sample of 7 focus groups comprised of 67 participants was used for this study. Findings revealed three overarching themes: (1) discrimination based on intersecting social identities; (2) being stuck: the cycle of oppression; and (3) we're not giving up: resistance through perseverance. The contextual influences of mothering while homeless with a mental illness were emphasized in the results. The findings illuminate the need for increased on ongoing advocacy at individual and structural levels.

Title: **Risk Factors of Homelessness and Sex Trade among Incarcerated Women: A Structural Equation Model**
Authors: Kim S, Johnson TP, Goswami S and Puisis M
Source: J Int Womens Stud, 12(1): 128-148, 2011
Summary: Incarcerated women are among the most vulnerable and perhaps the least studied populations in the US. Significant proportions of female inmates are substance users, and many living in unstable housing conditions or being homeless. Female inmates are often at high risk of engaging in sex exchange for drugs or housing needs. While a disproportionate number of incarcerated women have experienced childhood household adversities and maltreatments, the effects of these childhood experiences on psychosocial and behavioral outcomes of this population in later life. We apply a life course perspective to examine these pathways in a sample of incarcerated women in Cook County, Illinois. Findings demonstrated lasting, but differential, effects of household adversities and childhood abuse on subsequent life risks and opportunities among these women.

Title: **Risky Health Environments: Women Sex Workers' Struggle to Find Safe, Secure, and Non-Exploitative Housing in Canada's Poorest Postal Code**
Authors: Lazarus L, Chettiar J, Deering K, Nabess R and Shannon K
Source: Soc Sci Med, 73(11): 1600-1607, 2011
Summary: This study explored low-income and transitional housing environments of women sex workers and their role in shaping agency and power in negotiating safety and sexual risk reduction in Vancouver, Canada. A series of 12 focus group discussions were conducted with 73 women currently involved in street-based sex work. These women were purposively sampled for a range of experiences living in low-income housing environments, including homeless shelters, transitional housing, and co-ed and women-only single-room occupancy (SRO) hotels. Drawing on the risk environment framework and theoretical constructs of gender, agency and power, analyses demonstrate that women continue to be vulnerable to violence and sexual and economic exploitation and have reduced ability to negotiate risk reduction resulting from the physical, structural and social environments of current dominant male-centred housing models. Within the physical environment, women described inhabitable housing conditions in SROs with infestations of bedbugs and rats, leading women to even more transitional housing options such as shelters and couch-surfing. In many cases, this resulted in their economic exploitation and increased sexual risk. Within the structural environment, enforcement of curfews and guest policies forced women to accept risky clients to meet curfew, or work outdoors where their ability to negotiate safety and condom use were limited. Certain policies promoted women's agency and mitigated their ability to reduce risks when selling sex. These included flexible curfews and being able to bring clients home. The social environments of co-ed single-room occupancy hotels resulted in repeated violence by male residents and discrimination by male building staff. Women-only shelters and SROs facilitated 'enabling environments' where women developed support systems with other working women that resulted in safer work practices. The narratives expressed in this study reveal the critical need for public health interventions and safer supportive housing to account for the daily lived experiences of women sex workers.

Title: **Health, Access to Health Care, and Health Care Use among Homeless Women with a History of Intimate Partner Violence**
Authors: Vijayaraghavan M, Tochterman A, Hsu E, Johnson K, Marcus S and Caton CL
Source: J Community Health, 2011 (Epub 2011 Dec 22)
Summary: Among a sample of sheltered homeless women, we examined health, access to health care, and health care use overall and among the subgroup of participants with and without intimate partner violence (IPV). We recruited homeless women from a random sampling of shelters in New York City, and queried them on health, access to health care and health care use. Using multivariable logistic regression, we determined whether IPV was associated with past-year use of emergency, primary care and outpatient mental health services. Of the 329 participants, 31.6% reported one or more cardiovascular risk factors, 32.2% one or more sexually transmitted infections, and 32.2% any psychiatric condition. Three-fourths (73.5%) had health insurance. Health care use varied: 55.4% used emergency, 48.9% primary care, and 75.9% outpatient mental health services in the past year. Across all participants, 44.7% reported IPV. Participants with IPV compared to those without were more likely to report medical and psychiatric conditions, and be insured. Participants with IPV reported using emergency (64.4%) more than primary care (55.5%) services. History of IPV was independently associated with use of emergency (Adjusted odds ratio (AOR) 1.7, 95% CI 1.0-2.7), but not primary care (AOR 1.5, 95% CI 0.9-2.6) or outpatient mental health services (AOR 1.9, 95% CI 0.9-4.1). Across the whole sample and among the subgroup with IPV, participants used emergency more than primary care services despite being relatively highly insured. Identifying and eliminating non-financial barriers to primary care may increase reliance on primary care among this high-risk group.

YOUTH

Title: **The Mental and Physical Health of Homeless Youth: A Literature Review**
Authors: Edidin JP, Ganim Z, Hunter SJ and Karnik NS
Source: Child Psychiatry Hum Dev, 2011 (Epub 2011 Nov 29)
Summary: Youth homelessness is a growing concern in the United States. Despite difficulties studying this population due to inconsistent definitions of what it means to be a youth and homeless, the current body of research indicates that abuse, family breakdown, and disruptive family relationships are common contributing factors to youth homelessness. Moreover, the experience of homelessness appears to have numerous adverse implications and to affect neurocognitive development and academics, as well as mental and physical health. Substance use, sexually transmitted infections, and psychiatric disorders are particularly prevalent in this population. Whereas some of these problems may be short-lived, the chronic stress and deprivation

associated with homelessness may have long-term effects on development and functioning. Further, difficulties accessing adequate and developmentally-appropriate health care contribute to more serious health concerns. Suggestions for future research and interventions are discussed.

Title: **Social Control Correlates of Arrest Behavior among Homeless Youth in Five U.S. Cities**
Authors: Ferguson KM, Bender K, Thompson SJ, Maccio EM,Xie B and Pollio D
Source: Violence Vict, 26(5): 648-668, 2011
Summary: This study identified homelessness, substance use, employment, and mental health correlates of homeless youths' arrest activity in 5 cities. Two hundred thirty-eight street youth from Los Angeles, Austin, Denver, New Orleans, and St. Louis were recruited using comparable sampling strategies. Ordinary least squares (OLS) regression results reveal that being arrested for criminal activity is associated with length of homelessness, history of juvenile detention and incarceration, receiving income from theft, substance abuse, and mental illness. Arrests are also associated with interactions between lack of formal employment income and receiving income from theft and between drug and alcohol abuse/ dependency. Understanding the health and situational factors associated with homeless youths' delinquent activity has implications for providing more comprehensive health, mental health, and substance abuse services.

Title: **Resiliency and Survival Skills among Newly Homeless Adolescents: Implications for Future Interventions**
Authors: Lee SJ, Liang LJ, Rotheram-Borus MJ and Milburn NG
Source: Vulnerable Child Youth Stud, 6(4): 301-308, 2011
Summary: Recent studies on homeless adolescents suggest that the profiles of homeless adolescents are heterogeneous, and that certain clusters of homeless adolescents demonstrated resiliency and positive coping strategies. This study examined the relationship between HIV-related risk factors and resiliency (survival skills) of homeless adolescents over a 2-year period. Those who did not engage in unprotected sex reported significantly higher survival skills scores. Similarly, those who were monogamous during the study period reported significantly higher survival skills scores. However, there was a significant decline in survival skills scores after 6 months, regardless of the HIV-related risk factors. Findings from this study point to the urgent need to identify and target resilient adolescents early on to provide interventions to facilitate the transition to stable living situations before their resiliency deteriorates.

Title: **A Relationship-Based Intervention to Improve Social Connectedness in Street-Involved Youth: A Pilot Study**
Authors: McCay E, Quesnel S, Langley J, Beanlands H, Cooper L, Blidner R, Aiello A, Mudachi N, Howes C and Bach K
Source: J Child Adolesc Psychiatr Nurs, 24(4), 208-215, 2011
Summary: PROBLEM: Street-involved youth experience a range of mental health problems with elevated rates of psychiatric disorders compared with non-homeless youth. The overall objective of this pilot study was to evaluate the impact of a relationship-based intervention for homeless youth receiving services from agencies in downtown Toronto. METHODS: The final sample included 15 homeless youth who met the study inclusion criteria. The intervention and comparison groups were compared at baseline and post-treatment on measures of mental health symptoms, hopelessness, self-esteem, resilience, and social connectedness. FINDINGS: Participants receiving the intervention demonstrated a significant improvement in social connectedness, with a trend toward decreased hopelessness. Those participants who did not receive the intervention did not demonstrate any improvements in social connectedness and hopelessness. CONCLUSION: This preliminary pilot study suggests that providing a relationship-based intervention to street-involved youth may offer promise to strengthen social relationships and to mitigate overwhelming hopelessness and despair.

Title: **Homeless But Connected: The Role of Heterogenous Social Network Ties and Social Networking Technology in the Mental Health Outcomes of Street-Living Adolescents**
Authors: Rice E, Kurzban S and Ray D
Source: Community Ment Health J, 2011 (Epub 2011 Nov 15)
Summary: Although social integration tends to have positive effects on the mental health of housed adolescents, the role of homeless adolescents' social networks is more ambiguous. Social network data were collected from 136 homeless adolescents in Hollywood, California to examine how network ties are associated with symptoms of anxiety and depression. Face-to-face relationships with street-based peers were a risk factor for both anxiety and depression, while contacting home-based friends through social networking technology was found to be protective for depression. Community-based and public agencies serving homeless adolescents should consider facilitating the maintenance of these protective relationships by providing internet access.

Title: **Cell Phone Use among Homeless Youth: Potential for New Health Interventions and Research**
Authors: Rice E, Lee A and Taitt S
Source: J Urban Health, 88(6): 1175-1182, 2011
Summary: Cell phone use has become nearly ubiquitous among adolescents in the United States. Despite the potential for cell phones to facilitate intervention, research, and care for homeless youth, no data exists to date on cell phone use among this population. In 2009, a survey of cell phone use was conducted among a non-probability sample of 169 homeless youth in Los Angeles, CA. Levels of ownership and use, instrumental uses (connecting to case workers, employers) and patterns of connecting to various network types were assessed (family, home-based peers, street-based peers). Differences in socio-demographic characteristics and cell phone ownership were assessed via t test and chi-square statistics. Sixty-two percent of homeless youth own a cell phone; 40% have a working phone. Seventeen percent used their phone to call a case manager, 36% to call either a potential or current employer. Fifty-one percent of youth connected with home-based peers on the phone and 41% connected to parents. Cell phones present new opportunities for intervention research,

connecting homeless youth to family and home-based peers who can be sources of social support in times of need. Moreover, cell phones provide researchers and providers with new avenues to maintain connections with these highly transient youth.

Title: **Finding Shelter: Two-Year Housing Trajectories among Homeless Youth**
Authors: Tevendale HD, Comulada WS and Lightfoot MA
Source: J Adolesc Health, 49(6): 615-620, 2011
Summary: PURPOSE: The aim of this study was to (1) identify trajectories of homeless youth remaining sheltered or returning to shelter over a period of 2 years, and (2) to identify predictors of these trajectories. METHOD: A sample of 426 individuals aged 14-24 years receiving services at homeless youth serving agencies completed six assessments over 2 years. Latent class growth analysis was applied to the reports of whether youth had been inconsistently sheltered (i.e., living on the street or in a squat, abandoned building, or automobile) or consistently sheltered (i.e., not living in any of those settings) during the past 3 months. RESULTS: Three trajectories of homeless youth remaining sheltered or returning to shelter were identified: consistently sheltered (approximately 41% of the sample); inconsistently sheltered, short-term (approximately 20%); and inconsistently sheltered, long-term (approximately 39%). Being able to go home and having not left of one's own accord predicted greater likelihood of membership in the short-term versus the long-term inconsistently sheltered trajectory. Younger age, not using drugs other than alcohol or marijuana, less involvement in informal sector activities, being able to go home, and having been homeless for <1 year predicted membership in the consistently sheltered groups versus the long-term inconsistently sheltered groups in the multivariate analyses. CONCLUSIONS: Findings suggest that being able to return home is more important than the degree of individual impairment (e.g., substance use or mental health problems) when determining the likelihood that a homeless youth follows a more or a less chronically homeless pathway.