Homelessness 2

Health interventions for people who are homeless

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Homelessness has serious implications for the health of individuals and populations. Primary health-care programmes specifically tailored to homeless individuals might be more effective than standard primary health care. Standard case management, assertive community treatment, and critical time intervention are effective models of mental health-care delivery. Housing First, with immediate provision of housing in independent units with support, improves outcomes for individuals with serious mental illnesses. Many different types of interventions, including case management, are effective in the reduction of substance misuse. Interventions that provide case management and supportive housing have the greatest effect when they target individuals who are the most intensive users of services. Medical respite programmes are an effective intervention for homeless patients leaving the hospital. Although the scientific literature provides guidance on interventions to improve the health of homeless individuals, health-care providers should also seek to address social policies and structural factors that result in homelessness.

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This is the second in a **Series** of two papers about homelessness

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Introduction

Homelessness is a serious social problem with far-reaching implications for the health of individuals and populations. A review[1] of morbidity and mortality in people who are homeless is provided in an accompanying paper. Although rates vary depending on sampling and ascertainment strategies, a large proportion of homeless individuals have mental illnesses or substance misuse problems, or both.[1] Because of the high prevalence of serious health conditions in this marginalised population, effective action is urgently needed to address both ill health in people who are homeless and the underlying issue of homelessness itself.

The aim of this Series paper is to provide a narrative outline of interventions to improve the health of people who are homeless. We focus on homelessness in high-income countries, where most of the research on this topic has been done and conclude with a set of practical suggestions for health-care providers who are working with people who are homeless.

Primary health-care services

Primary health-care programmes that are specifically tailored to meet the needs of homeless individuals might be more effective in the achievement of positive health outcomes than standard primary health care. However, few controlled studies[2–4] have compared different primary care models for homeless patients. In the UK, the main models of primary care delivery are mainstream general practice with a special interest in the care of homeless individuals, specialised general practice restricted to homeless patients, and specialised primary care for homeless individuals situated within a hospital.[2] In the USA, federally funded health-care programmes for homeless people provide tailored care in 208 locations, with defining features that include active outreach to homeless individuals, integrated case management, close collaboration with community organisations, and guidance from community advisory boards.[5] In an observational study[6] of five clinical care sites in the USA, homeless patients in primary care programmes that were tailored for homeless individuals rated the quality of their care substantially higher than homeless patients receiving care at mainstream primary care sites. Panel 1 summarises the major findings by type of intervention or target population.

Mental health care services

Specific versus integrated services

Specific services for homeless individuals with mental illnesses have been tested against generic or standard care.[7,8] Outcome measures generally include a reduction in homelessness (eg, number settled in accommodation or nights homeless during follow-up), reductions in hospital use (inpatient stays or emergency department attendances), or a range of symptom, criminal justice, quality of life, and cost outcomes. Results from most studies have identified improved outcomes for specific services, although not necessarily in all domains. Results from a recent systematic review[9] showed that standard case management with coordination of services improved housing outcomes and reduced substance misuse. Critical time intervention (CTI) is a form of time-limited case management with a focus on maintenance of continuity of care for an individual during the crucial period of transition from- inpatient services to the community.[10] CTI consists of emotional and practical support provided by a case manager who has developed a good therapeutic alliance with the client before discharge and assertive community treatment (ACT) teams that provide intensive multidisciplinary community support through case managers with small caseloads (10–15 clients per case manager). ACT teams prioritise flexibility and active outreach to individuals rather than clinic attendances. A meta-analysis of ACT for homeless populations with severe mental illnesses found that homelessness was reduced by 37% and symptoms improved by 26%, but that hospital admission was not reduced.[11] Specific services also improved access and engagement compared with generic services.[7]

Search strategy and selection criteria

We did two literature searches. The first literature search identified recent systematic reviews and knowledge syntheses related to interventions of any type for homeless individuals. Because of the high prevalence of mental illness and substance misuse problems in homeless populations and extensive previous research in this area, the second literature search specifically identified articles on mental health services for homeless individuals. For the first search, we searched Medline, PsycINFO, Embase, Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effects, and Web of Knowledge databases for systematic reviews, meta-analyses, synthesis reviews, and knowledge syntheses that focused on homeless individuals and were published in English from Jan 1, 2003 to Dec 31, 2013. Search terms were (exp homeless persons) or ("homeless*" or "no fixed address" or "underhouse*" or "roofless*" or "seeking shelter" or "unhouse*" or "street involved" or "sleeping rough" or "unstabl* hous*" or "housing instability" or "precarious* hous*").tw (systematic review or meta-analysis or meta-analysis or knowledge synthesis or realist review or synthesis review).tw or limit to (meta-analysis or systematic reviews). This search yielded 217 articles, of which 21 were relevant systematic reviews of interventions for homeless individuals. For the second search, we searched Medline, PsycINFO, Embase, CINAHL, Scopus, and Web of Knowledge databases for articles about mental health services for homeless individuals that were published in English from the inception of each database to Dec 31, 2013. Search terms were homeless* and ("mental health" or "healthcare" or "mentally ill" or "mental disorder" or "service*" or "service provision" or "service delivery" or "treatment intervention"). This search yielded 397 articles, and manual searches and reference lists yielded an additional 59 articles. 58 relevant articles were identified, of which 50 originated from the USA, three from the UK, three from Australia, and two from other countries. The appendix lists key studies identified through these searches. Because of the diversity of populations and interventions included in the scope of this review, a narrative approach was chosen as the most appropriate method.

A formal comparative effectiveness analysis was not feasible. Of note, only four of the 21 systematic reviews of interventions for homeless individuals did a meta-analysis or calculated a pooled estimate of effect size; the remaining reviews did not try to do so because of the heterogeneity in the design of individual studies.

Major findings and key points were concluded on the basis of the results of the review and our expert opinion.

See Online for appendix

The term integrated services has a different meaning in the USA and Europe. In the USA, it generally suggests a specialised homelessness service combined with housing provision (often with enhanced social care). Joint mental health and housing services have been reported to be superior to mental health care alone.[8] In one systematic review,[12] mental health support with housing had a larger average effect size of 0·67 for the outcome of housing compared with 0·47 for ACT alone. A series of Housing First studies[13–17] have concluded that the provision of accommodation in independent units with support is so effective for homeless individuals with serious mental illnesses that it should precede efforts to engage these individuals in specific treatments. Findings from studies have shown that Housing First increases housing retention in specific subgroups, such as veterans,[18] individuals with substance dependence,[19,20] and rural residents,[21] and also results in improved subjective quality of life[22] and reduced reoffending.[23] A large ongoing multisite randomised controlled trial[24] of the Housing First model for homeless people with mental illnesses and high or moderate levels of need will provide additional information on the effectiveness and cost-effectiveness of this approach.

In Europe, integrated services refer to generic health-care services with special provisions for homeless individuals, such as enhanced outreach and case identification.[7] By contrast, dedicated homeless-specific services are much more likely to be provided by non-governmental organisations that tend to be smaller and contain very few trained mental health professionals, but are more likely to operate an active outreach and to work extended hours.[7] A review of service provision in 14 European capital cities concluded that homeless-specific services improved access and response to immediate needs, but that generic services with integrated care delivered higher quality mental health care from better trained staff.[7] When patients are successfully engaged, generic services might produce better long-term outcomes.

Co-occurring mental illness and substance misuse disorders

The prevalence of co-occurring mental illness and substance misuse (dual diagnosis) is high in homeless populations.[1] Substance misuse is a major barrier to access of effective mental health care in some jurisdictions. In a survey of European homeless-specific programmes, substance misuse was a stated exclusion criterion in more than 25 (22%) of the services, and was associated with aggressive behaviour in 49 (44%).[7] In the USA, many services are dedicated dual-diagnosis outreach teams,[25,26] and outcomes have been shown to be better when specific substance misuse programmes are provided.[3] In the European context, however, substance misuse staff and treatment programmes are more likely to be available in integrated services.[7]

Experiences of homelessness services

Few studies of subjective experiences of mental health-care services obtained data from homeless individuals themselves.[27–29] Overall, user experiences were negative. They reported that staff were unsympathetic and sometimes stigmatising and that regimes were inflexible

Panel 1: **Major findings regarding specific interventions and populations of people who are homeless**

Primary health care
- Primary health-care programmes specifically tailored to homeless individuals might be more effective than standard care and are more likely to achieve higher patient-rated quality of care.

Mental health care
- Standard case management with coordination of services improves housing outcomes.
- Assertive community treatment for individuals with severe mental illnesses improves housing outcomes and reduces psychiatric symptoms.
- Housing provision with mental health support is superior to mental health care alone.
- Critical time intervention services are effective for individuals transitioning into housing.
- Housing First, with immediate provision of housing in independent units with support, improves outcomes for individuals with serious mental illnesses.
- Homeless-specific services provided by non-governmental organisations with a few mental health professionals as staff can improve access to services and respond to immediate needs, but health-care organisations with special provisions for serving homeless individuals are more effective in provision of high quality mental health care.
- All mental health programmes for homeless individuals should have an integrated approach that accommodates and meets the needs of people with co-occurring mental illness and substance misuse disorders.
- Programmes for homeless individuals should support staff as they seek to overcome challenges in client engagement and service coordination, while avoiding the provision of services in a manner that clients believe is stigmatising, inflexible, or confusing.

Permanent supportive housing
- For homeless individuals with chronic alcoholism and frequent emergency department use, case management with supportive housing that permits drinking is effective in ending of homelessness and reduction of service costs.
- For chronically ill homeless adults being discharged from hospital, provision of case management and supportive housing is effective in reduction of hospital use.
- Interventions that provide case management and supportive housing have the greatest effect when they target individuals who are the most intensive users of services.

Medical respite
- Medical respite programmes that provide homeless patients with a suitable environment for recuperation and follow-up care on leaving the hospital reduce the risk of readmission to hospital and the number of days spent in hospital.

Substance misuse
- Standard case management with coordination of services reduces substance misuse.
- Many interventions are effective in the reduction of substance misuse compared with no intervention, but there is little evidence to indicate the superiority of any particular programme over another.
- There is debate regarding the desirability of interventions that emphasise abstinence from substance misuse versus those that adopt a harm-reduction approach. Contingency management for cocaine users and supervised injection centres for injection drug users are examples of effective interventions based on abstinence and harm reduction, respectively.

Homeless young people
- The evidence base for interventions for homeless young people is relatively weak, and most studies have focused on outcomes such as short-term reductions in substance use or risky sexual behaviour.
- Interventions using cognitive-behavioural methods seem to be the most promising.

and confusing. An exception was young homeless mentally ill individuals in Australia who described services as easy to access, although they did little for their self-esteem.[27] Many respondents were critical of homeless shelters and hostels—of their costs, rules, exclusions, and authoritarian manner—yet some reported a simultaneous wish for these sites to be drug-free and alcohol-free.[28] Overall, a striking feature of user views was the low priority they gave to mental health provision and staff, instead emphasising the need for physical health care and practical help. Staff opinions confirmed the difficulties with coordination and engagement, and a lack of outreach, skills, and ready access to accommodation.

Matching needs and services

Several studies report alternative attempts to test how services can meet the needs of homeless mentally ill individuals. Some of these reports[30–35] are from a 5-year demonstration project (ACCESS) in 15 US states. Of the 7213 individuals enrolled in the ACCESS study, 43·6% had unmet medical needs at entry. People with mental disorders had more unmet needs, but these decreased greatly if they received psychiatric attention. Service characteristics at the different locations seemed to account for more of the variation in care than did patient characteristics.[31] In 1828 clients, the main barriers to care were not knowing where to go (32%), being unable to

afford care (29%), the general hassle and waiting time (27%), and having previously been rejected by a service (16%).[32] Not surprisingly, mental health staff generally recognised mental health needs more often than did their clients, who identified general medical and dental needs.[35] Organisational features such as size and complexity and the presence of highly trained staff seem to directly affect the type of care that individuals received.[34,36]

Coordinated services

Several studies examined the embedding of mental health services for homeless individuals or coordination of mental health services into a wider provision of services. How this is done varies enormously—eg, integration of mental health services with substance misuse services and[37] colocating primary and mental health services[38] or general medical and mental health services are various methods of coordination.[39] Similarly to the linked housing and mental health services, every individual service description found improvement in some of its measures, although not in all. Several of these studies are derived from the ACCESS project, which identified that integration at the site level was achieved because local teams worked better together, but improvements in system-wide integration across the multisite project were not reported.[30]

Multifaceted interventions with permanent supportive housing

A few controlled trials have examined the efficacy of multifaceted interventions that include the provision of permanent supportive housing.[3,4] Three important trials have focused on specific subgroups of homeless individuals: those with severe alcohol problems and high service use,[40] those with chronic illnesses being discharged from hospital,[19] and those with HIV infection.[41] A study done in Seattle, WA, USA,[40] examined the effect of a one-site Housing First programme for homeless adults with chronic alcoholism who had frequent contact with emergency departments and the criminal justice system. Individuals entering the housing and case management programme, which permitted drinking, had significantly larger decreases in total service costs during a 6-month period compared with waiting-list controls. During a 2-year follow-up, 77% of programme participants remained continuously housed.[19] The Chicago Housing for Health Partnership study was a randomised controlled trial that investigated the effect of provision of case management and placement in supportive housing for chronically ill homeless adults who were being discharged from hospital.[41] This intervention resulted in a significant 29% reduction in hospital days and a 24% reduction in emergency department visits during an 18-month follow-up.[41] The intervention had no effect on physical functioning or mental health in all participants, but in the subset of participants with HIV infection, the likelihood of survival with intact immunity was significantly increased.[42] Finally, the Housing and Health Study was a randomised controlled trial that enrolled homeless and unstably housed people with HIV infection in Los Angeles, Chicago, and Baltimore to establish the effects of provision of case management and immediate housing through a rental assistance programme.[43] Recruitment in this study did not specifically target individuals who were frequent service users. The intervention improved housing outcomes, but did not have a significant effect on patterns of health-care use or behavioural risk factors for HIV transmission.[43] Taken together, these studies suggest that multifaceted interventions that provide case management and supportive housing have the greatest effect when they target homeless individuals who are the most intensive users of these services.

Medical respite programmes

When people who are homeless are admitted to hospital, discharge planning might become problematic when the patient recovers to the point that he or she is well enough to leave the hospital but still too ill to return to a shelter or the street. This situation might lead to either a prolonged hospital stay or discharge with a high risk of readmission. Medical respite programmes are transitional facilities that address this dilemma by providing homeless patients with a suitable environment for recuperation and follow-up care on leaving the hospital.[44] Although a definitive randomised controlled trial has not been done, a systematic review concluded that medical respite programmes reduce the risk of readmission to hospital and the number of days spent in hospital.[44]

Interventions for substance users

Several studies have examined a heterogeneous range of interventions for homeless individuals who are substance users.[3,4] Standard case management has been shown to be effective in reducing substance misuse and emergency department use.[9,45] Although many interventions are effective in reducing substance use in homeless individuals compared with no intervention or usual care, there is little direct evidence to suggest the superiority of any particular programme over another.[3] Several interventions, such as opiate replacement therapy for opiate dependence, are effective for substance users in general, although they have not been studied specifically in homeless populations.[2]

There are divergent opinions on the desirability and appropriateness of interventions for homeless individuals that encourage abstinence from substance misuse compared with interventions that adopt a harm-reduction approach and do not make abstinence a specific goal. Contingency management is a treatment model in which housing and work therapy is provided as long as the participant is abstinent from substance misuse, as measured on the basis of periodic urine tests.[46] A meta-analysis of studies of this treatment approach for homeless people with a crack cocaine addiction reported that abstinence rates were significantly higher in individuals receiving contingency management with or

without day treatment than in those receiving day treatment alone.[46] In a contrasting approach that uses a harm-reduction strategy, managed alcohol programmes provide controlled amounts of alcohol to homeless individuals with alcohol dependence, with the goal of engaging them with services and reducing high-risk behaviour and adverse societal effects.[47] A systematic review of managed alcohol programmes did not identify any experimental studies of the effectiveness of this model.[48] For individuals who use injection drugs, strong evidence from studies not specifically restricted to homeless individuals suggests that a supervised injection centre decreases needle sharing, reduces overdoses, and promotes client engagement with treatment.[2]

Interventions for homeless young people

Published research has consistently identified homeless young people as a group that is distinct from homeless adults. However, relatively few controlled studies have examined interventions for homeless young people.[3,4,49–51] Many of these interventions have focused on achievement of short-term reductions in substance misuse or risky sexual behaviour.[49,50] Systematic reviews have noted wide variation in the nature of the interventions and outcome measures used, a substantial risk of bias in most studies, and a paucity of studies achieving a good quality rating.[49,50] Interventions that used cognitive-behavioural methods seemed to be the most promising, but one systematic review reached the overall conclusion that there is not enough strong evidence to support specific interventions for homeless young people.[49]

Key points for health-care providers

Panel 2 summarises key points for health-care providers who work with people who are homeless. Health-care providers who work with individuals who are homeless should keep in mind the crucial importance of establishment and maintenance of a positive interpersonal relationship between themselves and the person who is homeless.[52] As noted in one synthesis review, the key ingredients for such a relationship include respect for the individual, upholding the person's dignity, building mutual trust, and showing warmth and caring through "acts of kindness".[52] Peer support workers, who have often had life experiences that are akin to those of their homeless clients, might have a particularly strong ability to develop positive relationships of this type.[52]

Health-care providers should familiarise themselves with the full range of programmes and resources for people who are homeless that are available in their community or work closely with staff who have this expertise. Community-based physicians can refer to homeless-specific clinical guidelines on how to adapt their practice to better meet the unique needs of patients who are homeless.[53] Hospital-based physicians should be aware that some homeless people have regular contact with primary care teams, shelter or hostel workers, outreach programmes, or case managers in the community. Proactive two-way communication between hospital-based and community-based providers is essential to facilitate smooth transitions of care. Doctors working with homeless individuals with mental illnesses in emergency departments might be unaware of the full range of local services and might need to develop systems that draw on either liaison psychiatry services for such knowledge or community mental health teams for follow-up. The risk of a failure to connect with community mental health teams is obvious, and where possible contact details of local homelessness services should be readily available.

Services for homeless mentally ill individuals are very varied and highly dependent on local circumstances, history, and resources for their configuration. The current scientific literature provides few firm recommendations for service structure, and established non-governmental organisations often shape local programming. Local, often non-statutory, services with active outreach to homeless people are more successful in engaging individuals who

Panel 2: Key points for health-care providers who work with people who are homeless

Interpersonal relationships

- A positive interpersonal relationship with individuals who are homeless is essential; the key ingredients for a positive patient–provider relationship include respect for the individual, upholding the person's dignity, building mutual trust, and showing warmth and care
- Peer support workers might have a particularly important role as members of health-care teams for people who are homeless

Community resources

- Health-care providers need to be familiar with the full range of programmes and resources that are available in their community for people who are homeless, or work closely with staff who have this expertise

Clinical care

- Adapted clinical guidelines are available to help health-care providers adjust their practice to better meet the physical and mental health needs of patients who are homeless
- Physicians working with homeless individuals in accident and emergency departments need to develop systems that ensure appropriate follow-up in the community
- When homeless individuals are admitted to hospital, proactive two-way communication between hospital-based and community-based providers is essential to facilitate smooth transitions of care
- Provision of health care should include collaboration between organisations with active outreach to homeless people who are difficult to engage; health-care teams that can provide general medical care, mental health care, and addiction treatment; and housing services
- When care is provided for an individual with a mental illness, the individual should be connected with whatever services are available locally rather than trying to precisely match the individual to a specific programme

Advocacy

- Health-care providers can be advocates for the establishment and maintenance of evidence-based interventions to improve the health of people who are homeless
- Although health-care providers understandably focus on interventions that address illness and risk factors for homelessness at the individual level, they should also seek to address social policies and structural factors that result in homelessness

are resistant to care. However, few of these services have highly skilled staff or comprehensive treatment programmes; for these, engagement in statutory, generic services is usually needed. Teams with an exclusive focus on mental health have little appeal for homeless individuals, who are more likely to engage in mental health care if it is partnered with accommodation services or general medical care. Substance misuse is such a pervasive problem in people who are homeless that it begs the question of the need for separate services; all services for this group need to be able to provide help with addictions. Physicians who are providing health care for a homeless individual with a mental illness should try to make a connection with whatever services are available locally. There is little to be gained by trying to match individuals to services with any precision. Instead, engagement is the key.

A paradox identified early in the development of homelessness services was that the likelihood of receiving care decreased with the complexity and severity of the homeless individual's needs, because each additional need served as an exclusion criterion. The only sensible response is to use any contact with homeless individuals as an opportunity to connect them with services. There is currently no convincing rationale for waiting for the right time or circumstances or striving too hard for a perfect match between the individual and the programmes available to them in the community. At the same time, there has been growing recognition of the importance of including individuals with experience of homelessness themselves as partners in the development and improvement of homelessness interventions and services.[54,55]

Physicians and other health-care providers can play an important part as advocates for the establishment and maintenance of evidence-based interventions to improve the health of people who are homeless in their community. Examples of evidence-based strategies include Housing First programmes that provide housing and support for homeless individuals with severe mental illnesses and substance misuse, or both; permanent supportive housing and case management for homeless people who are high users of emergency departments and hospital care; and medical respite programmes for homeless patients leaving the hospital. The central elements of interventions that are most effective include the provision of housing and an emphasis on client choice in treatment decisions, both of which increase the person's level of autonomy.[52]

Homelessness is ultimately the result of the convergence of individual vulnerabilities and structural factors.[56] Understandably, health-care providers working with homeless patients identify individual vulnerabilities such as mental illness or substance misuse that put the person at increased risk of homelessness and therefore tend to focus on interventions that address these vulnerabilities. However, to recognise that homelessness is equally the result of structural factors within a society, such as systematic inequities in educational and employment opportunities, a shortage of affordable housing, and social policies that are targeted against marginalised populations, is essential.[56] Health-care providers should understand that an effective strategy to address homelessness will need to include both interventions to improve the health of homeless individuals and larger-scale policy changes and interventions directed at these structural factors.

Contributions

All authors participated in the conception, design, writing, and revision of the manuscript. All authors approved the final version of the manuscript for publication.

Declaration of interests

We declare no competing interests.

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