WORLD HEALTH ORGANIZATION
EUROPE

# How can health care systems effectively deal with the major health care needs of homeless people?

January 2005

HEN Health Evidence Network
EVIDENCE FOR DECISION-MAKERS

## ABSTRACT

This is a Health Evidence Network (HEN) synthesis report focusing on the evidence of effective treatment for the types of ill-health from which homeless people often suffer.

Homeless people constitute a heterogeneous population characterized by multiple morbidity (primarily alcohol and drug dependence, and mental disorders) and premature mortality. The problems need to be addressed by many measures, requiring a focused primary health care system and multi-agency cooperation.

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When referencing this report, please use the following attribution:
Wright N.M.J, Tompkins C.N.E (2005) *How can health care systems effectively deal with the major health care needs of homeless people?* Copenhagen, WHO Regional Office for Europe (Health Evidence Network report; http://www.euro.who.int/Document/E85482.pdf, accessed 27 January 2005).

Keywords

HOMELESS PERSONS
DELIVERY OF HEALTH CARE – organization and administration
HEALTH SERVICES NEEDS AND DEMAND
META-ANALYSIS
EUROPE

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# Summary

## The issue

Homeless people have poorer physical and mental health than the general population, and often have problems obtaining suitable health care. This synthesis has critically reviewed the international literature pertaining to the health care needs of homeless people in countries with relatively well-developed health care systems. It does not deal with the causes and prevention of homelessness, but focuses on the evidence of effective treatment for the types of ill-health from which homeless people often suffer.

## Findings

Homeless people constitute a heterogeneous population characterized by multiple morbidity (primarily alcohol and drug dependence, and mental disorders) and premature mortality. The problems need to be addressed by many measures, requiring a focused primary health care system and multi-agency cooperation.

There is evidence that behavioural interventions for mental health problems, drug and alcohol dependence, and sexual risk behaviour can empower homeless people, and lead to lasting health gain, as well as helping in treatment retention. Effective interventions for drug dependence include pharmaceutical treatment, hepatitis B vaccination, advice about safe injection and access to needle exchange programmes. There is an emerging evidence base for the effectiveness of supervised injecting rooms for homeless intravenous drug users and for the peer distribution of naloxone in reducing drug-related deaths. Early evaluation of medically supervised injecting centres (MSICs) would suggest they have the capacity to reduce the incidence of drug-related deaths, stop the increase in reported hepatitis B and C infections, reduce the risks involved in injecting, increase the likelihood of starting treatment for drug dependence, reduce public sitings of discarded syringes, and do not increase theft and robbery.

## Policy considerations

Access to primary health care is a pre-requisite for effective treatment of health problems among homeless people. This will require addressing barriers to provision such as lack of health insurance. Cultural barriers due to stigma or lack of knowledge among health service staff can be addressed by relevant training activity. Barriers to effective multi-agency cooperation need to be addressed in order for homeless people get access to medical and behavioural interventions, re-housing and financial support.

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## Introduction

Homelessness is a complex concept embracing states of rooflessness, houselessness, living in insecure accommodation, or living in inadequate accommodation *(1)*. "Roofless" includes rough sleepers, newly arrived immigrants and victims of fire, floods or severe harassment or violence. "Houseless" includes those living in emergency and temporary accommodation such as night shelters, hostels and refuges and those released from long-term institutions such as psychiatric hospitals, prisons, detention centres, community or foster homes with nowhere to go upon release. "Living in insecure accommodation" describes people who are staying with friends or relatives on a temporary or involuntary basis, tenants under notice to quit, those whose security is threatened by violence or threats of violence, or squatters. "Living in inadequate accommodation" includes overcrowded or substandard accommodation. Such households are often "concealed," as people involuntarily share accommodation on a long-term basis because they cannot secure or afford separate housing *(2-5)*. The experience of homelessness is not universal for all those affected by it. While some people may only experience a single episode of homelessness, many have long-standing problems of access to suitable housing and are at risk of becoming periodically homeless *(6-8)*.

Having a home has been described as "having an adequate dwelling (or space) over which a person and his/her family can exercise exclusive possession, being able to maintain privacy and enjoy social relations, and having a legal title to occupy" *(1)*. European Union countries have different legislative frameworks for dealing with homelessness and different operational definitions of it. Therefore, comparative statistics on the prevalence of homelessness in European countries are not available *(1)*. However, it would appear that homelessness has grown in Europe since the 1980s, with a proportionally higher rate of growth among the young and women *(9)*.

There are many risk factors for becoming homeless *(10,11)*, such as disputes and relationship breakdown, physical or sexual abuse, lack of qualifications, unemployment, alcohol or drug misuse, mental health problems, contact with the criminal justice system, debt, lack of a social support network *(12)* and institutionalization or the death of a parent during childhood *(13)*. Institutional

factors for homelessness include fragmentation of services and a lack of community programs for difficult-to-serve people *(14)*. There is no evidence that the closure of long-term mental health institutions is a risk factor for homelessness *(15)*. Some commentators argue that this is because the treatment of homeless people with mental disorders is characterized by multiple brief hospital admissions with poor follow-up, rather than long-term hospital institutionalization *(15)*.

### Sources for this review

During November 2003, Medline (1966 to 2003), EMBASE (1980 to 2003), PsycINFO (1985 to 2003), CINAHL (1982 to 2003), Web of Science (1981 to 2003) and the Cochrane Library (Evidence Based Health) databases were reviewed. Key search terms were related to homelessness, health promotion, intervention studies, drug abuse, alcohol abuse and mental health. The review was not limited to publications in English. It included searching the World Wide Web using key terms, and grey literature was also accessed through discussion with experts.

The literature review specifically excluded asylum seekers, though such populations often access health services for the homeless *(19)*. This is a complex and growing health issue that arguably warrants a synthesis in its own right. The focus of this synthesis is homeless populations in high-income countries. To address the widely differing health, social and housing situations of homeless populations living in extreme poverty in low-income countries is beyond the scope of this synthesis.

## Barriers to health care for the homeless

Some of the barriers to health care for the homeless are discrimination, hours of business, appointment procedures, and financial disincentives for practitioners *(20)*. Discrimination against the homeless includes inaccurate generalizations that they are migrant *(21)*, violent, anti-social, or "undeserving" of support *(22–25)*. Many homeless are not members of a health insurance scheme and there are examples from different countries of their dependence upon hospital doctors, nurses and social workers for health care *(26,27)*. Cross-sectional surveys of urban homeless populations conducted in the United States describe between 41% and 81% as not having health insurance *(28,29)*. This proportion is less for homeless families. However, 26% of homeless families – versus 2% of housed families – lacked health insurance *(30)*. Having health insurance is independently associated with greater use of both ambulatory and inpatient hospital health services, medication compliance and lower reported barriers of needing care *(31,32)*. Having health insurance was not associated with accident and emergency department visits *(32)*.

## Primary health care for the homeless

As indicated above, homeless people face a risk of marginalization due to their age, gender, ethnic background or sexual orientation *(24, 33–36)*. To address these barriers, differing frameworks for providing health care to homeless populations have been described *(27,37,38)*. The first is the mainstream general practice that takes on an extended role (also known as "general practice with a special interest") in primary care provision for homeless people. The second is that of the "specialized" general practice that registers only homeless people *(24)*. It is uncertain as to how many homeless obtain care in each type of practice setting and this could be a topic for future research. Specialized general practices are usually only found in large cities and are therefore not a viable response to the problems of rural homelessness. In the United Kingdom, they have become more common, with legislation permitting trusts to employ general practitioners through salaried options to provide primary care in a multi-disciplinary team environment *(24)*. The merits of this model are that it integrates care of the homeless into mainstream general practice *(39)*. Specialized general practice, however, can provide more intensive and focused care for more complex cases where integration into mainstream primary care could be problematic. Therefore it is an effective setting for providing initial treatment and early rehabilitation *(24)*. Once their acute condition has stabilized and they are familiar

with the primary care setting, such patients can be encouraged to register with mainstream primary care *(24)*. Mainstream primary care is also the only viable option to meet the primary health care needs of the rural homeless *(134,135)*.

Other models seek to provide primary health care to homeless populations in secondary care hospitals *(19)*. Models vary from a single centralized unit to all hospital departments offering care. Social worker support appears to be a crucial factor in the success of such programmes *(19)*. However, primary care programmes for homeless people have led to a reduction in hospital admissions *(38)*.

Providing primary care to the homeless requires suitable organization, policies and working procedures to cover threatening behaviour, convenient appointment times and a multi-disciplinary team capability. Services need to be responsive to homeless groups who may have special needs.

## Patterns of morbidity and mortality among the homeless

Homeless populations, particularly rough sleepers, have a higher rate of serious morbidity compared to the general population *(40)*. Many homeless people present several symptoms and or diseases *(41)*. Additionally homeless people have high rates of imprisonment and of being crime victims, including abuse in prison *(42)*. Most offending behaviour is due to drug or alcohol habits or the social effects of intoxication, and is more common among the male homeless population *(13,43,44)*

Premature mortality is higher among homeless populations. A ten-year follow-up study of a cohort of homeless people in Denmark described age and sex standardized mortality ratios of 2.8 for men, 5.6 for women, 6.0 for suicide, 2.6 for natural causes, 14.6 for unintentional injuries and 62.9 for unknown causes. Risk factors for premature death were death of the father and misuse of alcohol and sedatives *(13)*. Premature mortality is confirmed by research from Germany that considered post mortem and autopsy findings of 388 deaths of homeless people. The average age of death was 44.5 years with unnatural causes accounting for a high percentage (62.6% deaths due to intoxications). Infection was the most common natural cause of death, at 16.8% *(45)*.

## Health care needs of the homeless

### Medical

On a medical/disease model, the most common needs of homeless people concern drug dependence, alcohol dependence or mental disorders, and dual diagnosis is common *(20,24,46,47)*. Additional causes of ill-health include injury (due to accidents or violence), poor condition of feet or teeth due to self-neglect, infections or skin complaints. Skin complaints most commonly include infestations or infections though inflammatory skin conditions. These include scabies, impetigo, tinea infections, warts, erythromelalgia, pediculosis, seborrhoeic dermatitis acne rosacea, eczematoid eruptions, xerosis, and pruritus. Such skin complaints are precipitated by minor foot trauma due to walking for long periods of time in inappropriate shoes, standing or sitting for long periods leading to venous stasis, oedema and infection, frost bite, skin anaesthesia due to alcoholic peripheral neuropathy, lack of hygiene due to unwashed socks or other items of clothing being worn for weeks or months or overgrown toe nails increasing the risk of foot lesions. Body louse infestations are also found in homeless populations, which can act as vectors for the common bacterial diseases of typhus trench fever or relapsing fever *(48–50)*. Other infections among homeless populations include diphtheria (usually of the skin) *(51)* or hepatitis A *(52,53)*. Infections can often result from intravenous drug use and include hepatitis B and C, HIV, septicaemia, encephalitis, endocarditis, cellulitis and abscesses or deep vein thrombosis with a possible tertiary complication of pulmonary embolus. Tetanus infection has also been reported in intravenous drug users *(54–56)*.

Smoking is common among homeless populations *(57,58)* and has been described as occurring in up to 80% of the homeless population *(59)*. Smoking, overcrowding, poor nutrition and HIV infection predispose homeless people to pneumonia, influenza and minor upper respiratory infections *(50)*. The prevalence of latent tuberculosis has been reported to be between 9% and 79%, and the active tuberculosis between 1.6% and 6.8% *(50)*. Treatment entails tuberculin test screening as chest x-rays and sputum testing are not necessarily feasible. When a diagnosis is made, contact tracing should take place and this is more effective through homeless shelters rather than named person contacts *(60)*. Treatment has higher completion rates if directly observed through housing programmes rather than in acute hospitals *(50)*.

Other interventions to reduce the prevalence of infectious disease include facilities to wash clothes and shower; vaccination against hepatitis A and B, tetanus, influenza, pneumococcus and diphtheria; podiatry interventions to provide adapted shoes or cut toe nails and insecticide application to shelter bedding.

## Drug dependence-related

Drug dependence is a major cause of illness among homeless people *(20)*. Polydrug use is common and the two most commonly used drugs are heroin and (crack) cocaine *(61,62)*. The major physiological complication of heroin use is death due to respiratory depression *(63,64)*. The evidence base for ill-health effects of cocaine is still emerging. There are case reports of toxic inhalation leading to pulmonary inflammation and oedema ("crack lung") *(65,66)*, acute toxicity (presenting as extreme agitation, irritability, paranoia and depression), and cuts and abrasions of the lips, increasing the risk of blood-borne virus transmission and thrombo-embolic events *(67,68)*.

Drug dependence in homeless populations is also associated with sexual risk. The international evidence base concurs that compared to housed drug users, homeless drug using communities are younger, highly sexually active with a high rate of partner change. They are more likely to have had recent unprotected vaginal intercourse or to have shared drug injection equipment in the last month. Exchanging sex for money or drugs is common, and homeless drug users generally do not access mainstream sexually transmitted disease (STD) control programmes *(70,71)*.

Reducing injecting-related risk behaviour has been judged a priority among homeless populations *(72)*. One possiblity is to offer hepatitis B immunization to homeless injecting drug users. An accelerated schedule (0,7,21 days), with a booster at 12 months, results in markedly superior completion rates compared to more traditional schedules *(73)*. Homeless drug users should be encouraged to use needle exchange schemes since such programmes reduce, but do not eliminate, the prevalence of blood-borne viruses *(74,75)*. It is difficult, though, to quantify the effect of needle exchange programs since the intervention is often delivered alongside other interventions such as counselling and testing, outreach, bleach distribution and education *(76)*.

Canadian research showed that schemes limiting exchange to one clean needle for every one returned are associated with higher rates of HIV than schemes with no limitation *(77)*. A major reason for the sustained high prevalence of hepatitis C in injecting communities is the sharing of injecting paraphernalia such as spoons and filters *(78)*. An important preventive measure therefore is to encourage users to not share any injecting equipment. In the United Kingdom this has been facilitated by providing a legal framework for the distribution of injecting paraphernalia, following earlier legislation in other European countries. However, in some countries (most notably the United States) distribution of injecting paraphernalia contravenes federal legislation (*79*). The effectiveness of paraphernalia distribution in reducing the incidence of blood-borne viruses requires further research.

Prescribing injectable heroin, for example in centres where the injection is supervised, is receiving renewed attention in many European countries. A recent Cochrane review of randomized controlled trials examined the evidence base for the effectiveness of heroin prescription in the reduction of relapse to heroin, the reduction of criminal activity, retention in treatment services and improvement in

health and social functioning *(80)*. The review included four studies with a total of 577 patients, and concluded that no definitive findings are possible because of the heterogeneity of the experimental studies eligible for inclusion in the review. It recommended that heroin prescription be a topic of further research, and stated that results favouring heroin were from studies where the prescription was addressed to patients who had failed previous methadone treatments. The availability of heroin prescription for homeless populations varies in different countries. For example in Switzerland it is available to homeless populations through prescription among prison populations, whereas in the United Kingdom, it is recommended for users who have failed oral methadone treatment.

It is important to make drug users aware of the risk factors for heroin related death, namely, injecting alone, polydrug use, particularly the use of benzodiazepines or alcohol with heroin *(81)* and a loss of tolerance after a period of enforced or voluntary abstinence *(82)*. Future developments for homeless drug users are likely to include programmes for peer administration of naloxone *(83)*. Recently, the legal framework for peer administration of naloxone has been agreed in New Mexico, USA, *(84,85)*. Early evaluation of these programmes of peer training and empowerment is based on descriptive data only. There is some evidence to show they are effective in reducing mortality from heroin-related death *(84,85)*.

There appears to be a paucity of European research evaluating the impact of behavioural and empowerment programs for drug abuse. Common findings from the American literature are: assertive community treatments retain users in services but do not yield high rates of abstinence *(86)*; therapeutic communities for those with dual diagnoses result in greater reductions in drug use than community interventions (though both reduce it) *(87–89)*, and limiting disability payments to homeless people with dual diagnosis did not lead to a reduction in number of substance using days per month *(90)*.

Research in the United States studied homeless crack cocaine abusers and randomized them to usual care (UC) or an enhanced day treatment program plus abstinent contingent work therapy and housing (EC). EC had 36% fewer positive cocaine toxicologies at two months, 18% fewer at six months, 52 fewer homeless days in the past 60 and 10 more days employed in the past 30 days from baseline to 12 months. The authors summarized that homeless cocaine users can be retained and treated effectively *(91)*. In Toronto, Canada, prevention programmes for cocaine users include distribution of safer kits – including a glass pipe, lip care products and pipe-cleaning equipment – a key means of avoiding the transmission of blood-borne viruses and TB *(92)*.

There are best practice guidelines applicable to homeless drug users available in the international literature for professionals working with drug users *(93)*. Some examples of these include GPs only prescribing with the support of a drug worker. The drug worker offers an adequate assessment and devises an agreed treatment plan *(94)* prior to initiating substitute opioid medication. There is only an established evidence base for buprenorphine and methadone maintenance medications, which has demonstrated reduced crime and drug use *(95,96)*. Some homeless drug users present to primary care having recently moved to the area and request immediate continuation of the prescription prior to assessment. The prescriber should only agree to this once the history has been confirmed with the previous prescriber to minimize the risk of duplicate prescription.

Political resistance to certain policies for drug treatment may be based on a belief that these promote, instead of prevent, drug use. Examples include opposition to clinically supervised safe-injecting rooms *(97)* and opposition to needle exchange facilities *(98)* (particularly in prisons) or policies of incarcerating homeless drug users who have committed acquisitive crime due to limited availability or accessibility of drug treatment *(99–101)*.

The strategy for harm reduction has often been separated from an activist agenda to legalize illicit drugs. International research has demonstrated that medically supervised injecting centres (MSICs):

- reduce drug-related deaths
- stop the increase in reported hepatitis B or C infections

- reduce injecting-related risk behaviour
- increase the likelihood of starting treatment for drug dependence
- reduce public sitings of discarded syringes
- do not increase theft and robbery
- increase in the acceptance of the centres from both businesses and residents over the study period *(102–104)*.

Research from Frankfurt showed that a drug user who overdoses on the street is ten times more likely to stay in hospital for one night compared to a drug user who overdoses in a MSIC *(105)*. This confirms that the economic evaluation of deaths averted by such and intervention is comparable to other widely accepted public health measures. The benefit to homeless drug users is clear from the Sydney evaluation, in which the most common reason given by drug users for not using the centre was that they injected in the privacy of their own home. Some commentators contend that homeless populations should therefore form a priority group for MSIC activity *(106,107)*.

Effective harm reduction policy also includes providing a legal framework for the distribution of clean drug use equipment on order to minimize health risks. Such policy should allow needle exchange facilities without limitations on numbers of needles distributed, and facilitate distribution of injecting paraphernalia (filters and spoons), since despite needle exchange, unsafe injecting practices persist among exchange users *(108)*. French research demonstrated that having both needle vending machines and needle exchange programmes results in wider coverage of the drug using population *(109)*. Recently in the United Kingdom, the supply of some injecting paraphernalia including citric acid and has become legal. The evidence base does not support a belief that harm reduction interventions promote, condone or increase the prevalence of drug use *(110)*. Therefore it is legitimate to review arguments against the development of credible harm reduction policy and practice among homeless populations.

## Sexual behaviour-related

There is limited evidence to inform best practice for targeted interventions for safe sex. Common findings are that interventions seeking to effect attitudinal and behavioural change through interactive methods such as role-playing, video games and group work lead to a lasting reduction in both risk from drugs and sexual activity *(111-114)*. One randomized clinical trial study evaluated whether some preventive interventions actually promoted risky sexual activity in previously sexually inactive homeless people and demonstrated no increased risk from the intervention *(115)*.

Little research has been undertaken into homeless women's perception and use of contraception. One study in the United States demonstrated side effects, fear of potential health risks, partner's dislike of contraception and cost as deterrents *(116)*. A narrative review of the literature pertaining to sexually transmitted diseases among drug users and street youth concluded that homeless people have a high rate of partner turnover, frequently exchanged sex for money or drugs, and that there is a high prevalence of sexually transmitted diseases, including HIV, among the homeless (71). The review called for targeted special outreach STD control programs for homeless populations.

## Alcohol dependence-related

Alcohol dependence is common among homeless populations *(24,117)* and many present to health services with potentially serious neurological, gastroenterological, cardiovascular or psychosocial complications. German research showed homeless people with alcohol dependence were more likely to have had an alcoholic parent, had a higher number of children and a lower level of education and job qualification than housed individuals with alcohol dependence syndrome *(118)*.

Research has found a high use of general medical or social care services by homeless alcoholics but poor use of alcohol dependence specific services *(119,120)*. Research among homeless women described that the women had more addiction symptoms than positive effects from using alcohol, and that they associated not having an alcohol-using partner with having a positive attitude to giving up

alcohol. In terms of drug use, positive attitude about quitting drugs was predicted by more drug problems, greater drug use in past six months, more active coping, more education, less emotional distress, not having a drug using partner and fewer addiction symptoms *(121)*.

Research among homeless alcohol-dependent recovering mothers in the United States identified that completion of aftercare programs was predicted by length of residential drug treatment, length of sobriety, strong support networks and concerns about housing and parenting. Emotional instability and the severity of problems correlated with participation in the peer support group *(122)*. Other research randomized homeless alcoholics to either a community reinforcement approach or standard treatment. While both groups showed marked improvement in employment and housing stability, there was a significantly greater decline in drinking at two months and at one year with the community reinforcement approach. Recovery from alcohol dependence appears to be strongly associated with personal motivation and a supportive intervention programme. Significant group improvements in alcohol management, housing stability and employment status have been shown in a further randomized intervention trial whereby homeless alcohol abusers were randomized to either a high intensity program (case management plus peer-supervised housing), a medium intensity group (peer-supervised housing only) a housed, and a non-housed control group. The authors found significant improvement within the groups in all of the outcomes but suggest that clients' personal motivation for recovery, rather than programme-related factors, were most influential in determining outcomes *(123)*.

Three types of service delivery intervention models for homeless alcohol and/or substance abusing men in the United States were evaluated and all improved significantly in terms of reduced alcohol and cocaine use, increased employment and increased stable housing. Successful outcomes were predicted by lower recent and lifetime substance use, fewer prior treatment episodes, more stable housing at baseline, fewer incarcerations, and less social isolation *(124)*. In summary, the type of intervention appears to be less important than the fact that a supportive intervention is offered.

## Mental health-related

In homeless populations, mental illness commonly presents in the form of schizophrenia, depression and other affective disorders, psychoses (including drug-induced psychosis), schizophrenia, anxiety states or "personality disorder" *(34,46)*. A Danish study of homeless populations with mental health problems found 90% were male, 90% aged 20-59 years, 98% unmarried, separated or divorced and only 2% were employed *(47)*. A cross-sectional study of 900 homeless people in the United States demonstrated chronicity of homelessness to be associated with schizophrenia, antisocial personality, earlier onset of major depression, conduct disorder, earlier onset of drug misuse and severity of alcohol use *(125)*. Twenty per cent of homeless people with mental ill-health are dually diagnosed with substance dependence *(125,126)*. Less than one-third of homeless people with mental illness actually receive treatment *(40)*. For some elderly homeless people, mental illness is the entry into homelessness *(34)*.

The European and American literature on mental health for homeless people appears to concur on the need for active case management programmes. Such programmes need to integrate social services with psychiatric care *(127)*. Assertive community treatment programmes can shift the locus of care from crisis-oriented services; a randomized trial showed that they result in fewer psychiatric inpatient days, fewer emergency department visits, more days in community housing, more outpatient visits and significantly greater improvements in symptoms, life satisfaction and perceived health status than generic community mental health services *(128)*. Research from the United States demonstrated that compared to those in shelters and service agencies, street homeless people were more likely to be male, older, have psychotic disorders, be less interested in treatment and take longer to engage in case management *(129)*. However, street outreach engaged such people into treatment with an improvement in health. Research from Australia demonstrated that psychiatric outreach services to residents of homeless refuges reduced both the rate and duration of psychiatric hospital admissions *(130)*. Given that death from overdose is common among homeless people, caution and safe

prescription should be exercised in prescribing antidepressants which are cardiotoxic or respiratory toxic.

## Conclusions

Multiple morbidity, particularly polydrug use, alcohol dependence and mental ill-health are common among homeless populations. Premature mortality is also common, particularly heroin-related, and the future could entail peer use of naloxone to prevent drug-related deaths. There are good examples that primary care settings with multi-disciplinary teams can provide effective health care and prevention for homeless people. Behavioural interventions for mental health, drug or alcohol dependence, or sexual risk can empower homeless people and help to retain them in treatment. The type of community intervention is less important than the fact that an intervention is offered. Further research is required to gauge whether the positive impact of behavioural interventions is in part due to a placebo effect. Residential interventions appear to lead to greater reductions in drug use than community interventions. A future challenge is to involve homeless people as peer "empowerers." Previous research has argued that peer involvement of homeless people will maximize the success of interventions, yet such practice is not widespread *(72)*. More research is needed to quantify the extent of homelessness throughout Europe, to evaluate the health needs, and effectiveness (particularly cost-effectiveness) of interventions among homeless populations.

There are several policies outside the issues dealt with here that may have significant effects on the health of homeless people. One is efforts to provide healthy housing to homeless people. A healthy housing policy acknowledges the need for health and social support as well as housing support and entails a shift from large-scale remedial institutional accommodation towards small-scale and individualized assistance. In some countries this has meant a changed role for local authorities, whereby they act as the public sector purchaser of services from the voluntary and private sectors, via competitive bidding with quality assurance standards *(9)*. In general, the countries in the European Union are making a shift from viewing homelessness as due to individual limitations towards a view that encompasses structural limitations *(9)*. An example of this is the Homelessness Act 2002 for Scotland, which aims to give every homeless person a right to a home by 2012 *(132)*. This will abolish the concept of "priority need" which has excluded homeless people who are "intentionally" homeless. There is limited research evaluating the effectiveness of supported housing programs. One study compared immediate access to independent living, with the effects of a housing program in which clients were offered different services, including independent living, step by step. The supported housing scheme achieved better housing tenure than the comparison group *(133)*.

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