# Housing and Health

*Introduction*

Historically, there has been recognised a directrelationship between substandard accommodation and poor health. The IndustrialRevolution in Britain resulted in low standard working-class housing beingbuilt quickly to meet this increase in demand for workers. Over-crowdeddwellings, inadequate sanitation and a proclivity to dispose of all forms ofwaste in cesspools, rivers and the street resulted in severe epidemics of manyillnesses, predominantly those which are waterborne. In the preface of *OliverTwist*(Dickens, 1839 [1994]), the author summarises the problem effectivelyby stating:

I am convinced that nothing effectualcan be done for the elevation of the poor in England until their dwellingplaces are made decent and wholesome. This reform must proceed all other socialreforms, without it those classes of the people which increase the fastest,must become so desperate and be made so miserable, as to bear within themselvesthe certain seeds of ruin to the whole community (Dickens, 1839).

Many of the most significant improvements in health haveresulted from progression in public health reform, most notably clean water,sanitation, and reduced exposure to extreme cold associated with improvedaccommodation. However, the second half of the twentieth century has seen adecline in political interest in the issue of poor housing, despite overwhelmingevidence of the health consequences of poor housing and increasing economicdisparity among different social groups (Potvin, *et. al*., 2002). Whilethere has been a dramatic improvement in general health in industrial countriesover the last century, some sections of society still live in poverty-strickenconditions, with indications that the divergence between rich and poor is increasing(Stanwell-Smith, 2003). Economically deprived communities frequently reside ininferior housing and unsanitary environments, and these conditions are directlyassociated with the common health problems reported in such populations.There currently exists a substantial body ofresearch into the many relationships between housing and health status (Dunn,2000). The majority of this research has focused on the connections betweensubstandard and crowded housing conditions and incidence of injury, disease,and myriad physical ailments.

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Epidemiological studies have determined that certaincontaminants in the residential environment, such as mould, dampness, and pestantigens, can cause or exacerbate a range of respiratory problems (Bornehag, *et.al*., 2005), particularly among children and the elderly. Structuraldeficiencies, overcrowding, poor ventilation, inappropriate ambienttemperatures and low-quality construction and maintenance have been directlylinked to excessive incidences of infectious diseases, asthma,

respiratoryinfections, injuries and an overall shortening of lifespan. Exposure toenvironmental hazards, such as carbon monoxide, pesticides, inadequatelymaintained utilities, and tobacco smoke, tends to be greater within sociallyand economically deprived areas, and accounts for a number of serious healthissues (Klitzman, *et. al*., 2005).

The UK and Ireland have both a high rate of povertyand the worst birth weight in deprived areas compared to any other WesternEuropean country (Sandwell-Smith, 2003). The English House Condition Survey showedthat 1,522,000 UK dwellings did not meet the required suitability standards(EHCS, 1996). For many already deprived communities, the only housing availableis substandard. The World Health Organisation (WHO) recommends that, duringcold weather, ambient room temperature should remain constant at 18-20C (WHO,2005), however, it is estimated that 40% of the UK population resides intemperatures below these guidelines. Similarly, the UK has 19% of cold, damphousing compared to the 9% recorded in Germany (EHCS, 1996). Despite somemeasure adopted by local governments, housing policy remains insufficient inmany areas. For example, insulation of properties is recognised as a costeffective intervention that could increase ambient room temperatures while decreasingfuel costs for poverty-stricken communities, however, the Warm Front scheme,which provides funding for insulation, is not available to pregnant women andyoung children. Despite repeated evidence of the effects of poor housing, and associatedlack of heating, on public health interventions remain insufficient.

The population of Europe had expanded byapproximately 2.5% between 1990 and 1998 (WHO), with growth more prevalentwithin the south. Eastern Europe is considered poorer, with increasing rates ofunemployment (WHO, 2002). Comparatively, eastern Europe had proportionatelyhigher incidences of injuriea, nutritional deficiencies, and cardiovascular andinfectious diseases. Similarly, the EU nations have a lower proportion of largehouseholds and a high proportion of single person households; the resultinghousing densities within the eastern countries can account for the higher rateof substandard health levels (WHO, 2002).

Affordable accommodation for poverty-strickenfamilies is generally restricted to housing with inferior physical properties(Dunn, 2000), often in surroundings with socio-environmental problemsdetrimental to physical and psychological well-being. This housing tends to beconcentrated in specific and discrete locations, resulting in a form ofsegregation for low-income communities, often with poor access to employment,leading to socially deprived neighbourhoods (Potvin, *et. al*., 2002). Neighbourhoodsthat are unsafe, with limited access to essential goods and services and fewopportunities for social integration, also pose health risks (Klitzman,*et.al*, 2005), particularly for the poor, the elderly, and other vulnerablegroups. Although technically affordable, accommodation for poorer families canbe disproportionately expensive, and the payment of large rental or mortgagecosts from already meagre finances can result in less disposable income forfuel, food and other basic necessities (EHCS, 1996). Obesity is a familiarhealth issue associated with poverty; a consequence of low incomes

andinexpensive inferior, high fat, high salt diets. Consequentially, it has beendetermined that people with serious health issues are far more likely to occupythe least health-promoting segments of the housing market, which may, in turn,exacerbate their health problems. A broad cross-section of the community is nolonger provided for with regards to the social housing sector, and has becomecharacterised by deprivation and social exclusion (Curtis, 2004). Theowner-occupier sector has expanded, and now includes more people on low incomesthan ever before (EHCS, 1996). The resulting increase in stress as a result ofmortgage debt, arrears and repossession is a major public health issue, and onewhich is rarely addressed.

Low-income and poverty-stricken householdstend to move residences more frequently than middle and upper income families.Numerous studies show negative associations between residential mobility and behaviouraland cognitive problems, particularly in developing children (Dunn, 2000). Inturn, inadequate housing may influence individuals' health and mentalwell-being by increasing their level of stress as they are affected by securityand long-term stability (Curtis, 2004).

*Children*

Low quality housing distinctly affectsthe most vulnerable sections of society: children, the elderly, and thementally and physically impaired. During physical and psychologicaldevelopment, children are more at risk; poor housing and living environmentscan lead to permanent health issues for the child. Crowded living conditions canresult in easier transmission of infectious diseases, such as tuberculosis(Curtis, 2004), and higher incidences of respiratory illness, such asbronchitis and asthma, particularly when residence is shared with smokers. Excessivenoise can result in sleep deprivation, which in turn can affect growth andpsychological well-being of children, and similarly, can have various negativepsychological effects on adults and children alike, including irritability,aggression, depression and inability to concentrate, which is reported tocontribute to family tensions and potentially violence.

The health and well-being of children areclosely related to housing quality, suitability and affordability. Housing is akey component of both the physical and social environments in which childrenlive, and it plays both a direct and indirect role in the achievement ofpositive development. Studies indicate that stable, safe and secure housing isvital to children's healthy development (Board of Science and Education, 2003).Faulty structure and inadequate heating, for example, can cause accidentalinjuries (English House Condition Survey (EHCS), 1996); fire is one of theleading causes of accidental death among children in developed countries. Factorsaffecting the health of children include the cost, quality, tenure andstability of the housing, along with the neighbourhood environment in which thechild resides.

*The elderly*

Longevity of society in the developedworld has increased over the past century. However, studies have establishedthat lifespan is positively influenced by living in appropriate, affordable andsafe housing of good quality. Housing is linked to many of the twelvedeterminants of an elderly person's health as identified by internationalhealth committees, including physical environment, social environment, lifestyleand health care, income and social status.

Poor housing contributes towards greater mortalityrates among the elderly in winter, and greater incidences of avoidableaccidents within the home and the local neighbourhood. High susceptibility toillnesses, particularly respiratory problems, associated with old age maybegreatly exacerbated by inferior housing, and can result in a much higherhospital admission rate and mortality rate than seen in the same age groupliving in better quality accommodation.

*Disabilities*

Difficulties in accessing and maintainighousing can be acute for people with physical disabilities. Internationally,there are definite obstacles with regards to affordable housing deficiencies,and physically disabled individuals confront specific barriers in securing andretaining safe and suitable accommodation. By the 1970s, advances in medicineand technology began to prolong the lives of physically disabled adults, however,housing for these individuals was primarily limited to nursing homes; a problemwhich still exists. As a result of this shortage of appropriate housing, manyof these people remain in long-term care facilities rather than living independently,regardless of their specific disability.

*Homelessness*

The relationship between homelessness andmental and physical health are irrefutable. Regardless of geography, homelessnessis associated with higher incidences of accidental and non-accidental trauma,addictions, sexual assault, and a plethora of physical health conditions,including tuberculosis, skin infections and conditions, and poor bloodcirculation (Curtis, 2004). Rates of mental illness among the adult homelesspopulation within the developed world are estimated at between 10 and 50 percent. In a relatively recent study conducted among the homeless male populationof Toronto, Canada, mortality rates were significantly higher compared to otherToronto social groups. Mortality rates were established at eight times higheramong men aged 18 to 24 years, four times higher among men aged 25 to 44 years,and twice as high among men aged 45 to 64 years (Hwang, 1999).

Countless studies have previously determined aspecific connection between homelessness and severely diminished health levelsamong any given population (Hwang, 1999). Access to appropriate, affordablehousing offers benefits beyond the basic necessity of shelter, includingimproved health and well-being, and reduced levels of mental health disorders.

*Conclusion*

Everyone has the right to a standard of livingadequate for the health and well being of himself and of his family, includingfood, clothing, housing and medical care. (General Assembly of the United Nations, 1948)

In the European Region, addressing inequities inhealth has been fundamental to the work of WHO and features prominently in thetargets for 'health for all' (WHO, 2002). Despite these efforts, however, thereis critical recognition that poverty itself is a distinct and serious problem.Poverty-stricken communities, regardless of geographic location, suffer frominadequate housing, a deficiency in remunerative employment and theinsufficient means to guarantee a nutritious diet. Consequentially, poor healthis predominant within low-income sections of society, and the location ofaffordable housing frequently results in marginalisation, social exclusion(Curtis, 2004) and the associative mental health issues.

Central and eastern European populations with transitionaland often instable economies are particularly at risk as a result of socialpoverty and inferior public health, predominantly as a result of the inabilityto provide payment to new health care systems. Many subsections of society arehigh-risk with regards to poor housing and health, and numerous groups,including children, the elderly, people with mental illness, and displacedindigenous communities, such as Aboriginal peoples, rely on suitable housing toprovide access to other forms of support and interventions with broader,positive individual and social effects (Curtis, 2004).

There is conclusive evidence that habitation in substandardhousing environments and experience of poor socio-economic circumstances duringchildhood negatively influences health status in adulthood. Vulnerable groups,including the elderly, the very young and those suffering from long-term illhealth, are at specific risk, particularly as they often have diminished immunesystems and the greatest exposure to many specific hazards due to the lengthyperiods that they spend indoors (Klitzman, et. al., 2005). Insufficientamenities, shared facilities and overcrowding are very much a concern withinfectious disease, while damp and mould can cause various debilitatingrespiratory problems (Bornehag, *et. al*., 2005). However, the debatearound housing and health tends to be concerned with discussion of the direct coursefrom poor housing to health (Dunn, 2000). There is much less consideration ofthe indirect effects of poor housing upon health, such as social exclusion(Curtis, 2004) and depression, and psycho-social aetiologies of disease arefrequently overlooked. However, in recent years socio-economic determinants ofhealth have returned to policy debates and housing circumstances are, onceagain, identified as a critical influence upon public health (Board of Scienceand Education, 2003). Epidemiological studies have recently shifted focusedtowards a broader-ranging perspective with regard to poverty, health andquality of life, which presents the potential of enhanced understanding of thedeterminants of health status.

As with many health determinants, the quality ofaccommodation is directly related to income. Minimising the adverse effects ofpoor housing remains a major challenge. Health disparities are not reducing inthe UK, and the worst health is experienced by the most socially andeconomically deprived (Stanwell-Smith, 2003). As in the nineteenth century,there is a profound need for concerted public health reform. Central to thismust be improved living standards and prevention of ill health.

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