
How do Health Inequalities Intersect with Housing and Homelessness?

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Introduction

Housing is an important determinant of health. A healthy home is somewhere that provides for our needs, makes us feel safe and secure, and allows us to stay connected to our community. In contrast, poor housing – such as cold, damp homes, insecure tenancies, overcrowding, and lack of affordability – can have a detrimental effect on people’s mental and physical health. Housing problems are not equally distributed. Inequalities in society drive inequalities in health. Certain social groups and communities such as low-income households are more likely to be affected by housing problems which can harm their health. The COVID-19 pandemic has further exposed existing health inequalities and the stark differences in housing conditions may have contributed to the unequal impact that the pandemic has had on different groups in the UK. In this article, we outline the links between health and health inequalities with housing, drawing on evidence from the UK. We then set out how taking a complex systems perspective may help identify solutions to address health inequalities related to housing. Many of the issues that we highlight here are common to other European countries and elsewhere.

Where we live is important for our health and wellbeing. Not having a place to call home, insecure tenancies and living under the threat of eviction, high housing costs, housing in poor condition, and overcrowding can all have a detrimental effects on people’s mental and physical health (The Health Foundation, 2017; Tinson, 2019). For example, living in a cold, damp home can lead to poor physical health and respiratory problems. High housing costs may place a strain on people’s finances, limiting the amount they have to spend on other goods that are needed for good health such as quality food.

In England 2016/17, about a third of households – that is 7.5 million – were living in poor housing, involving either overcrowding, an affordability problem, or living in a non-decent home (Tinson and Clair, 2020). More recent data from 2018/19, shows

that 2% of households had someone living with them in the last 12 months who would otherwise be homeless (MHCLG, 2020). Eurostat data on housing conditions shows that in 2019, 17.1% of the EU population lived in overcrowded households, 9% faced affordability problems, and about 7% were unable to keep their home adequately warm (Eurostat, 2021).

The relationship between health and housing is a complex one, influenced by many related factors such as income and individual factors, but the links need to be understood to help reduce health harms and inequalities. The main mechanisms through which housing intersects with health are in relation to three broad areas: housing affordability, housing conditions and housing stability and security (Tinson and Clair, 2020). This is explained further below with data from the UK.

Housing affordability relates to the financial pressure caused by housing payments, both for housing itself and for utilities and maintenance. It affects health directly, for example causing stress and anxiety but also indirectly – particularly through reducing the resources available to spend on other things which may promote good health such as healthy food. Affordability problems can also contribute to overcrowding as households seek to share the fixed costs of accommodation across more individuals, as well as potentially undermining housing security. A range of studies in the UK have found associations between housing affordability and worse health, beyond general financial difficulties (Taylor et al., 2007). For example, Raderman et al. (2021) found affordability problems were associated with worse mental, physical, and general health, robust to choice of affordability measure.

Housing conditions include the physical characteristics of homes, including the quality, amount of outdoor space, as well as levels of overcrowding. Poor quality housing – such as being damp or mouldy – can directly affect respiratory health, particularly for children (Shaw, 2004). The alleviation of general housing quality problems is associated with reductions in hospital admissions (Rodgers et al., 2018). Overcrowding – too big a household for the dwelling – was associated with psychological distress and respiratory conditions (ODPM, 2004) before the COVID-19 pandemic, and the spread of COVID-19 since (see for example, Raisi-Estrabragh et al., 2020). In England, overcrowding has been increasing while fewer homes are classed as ‘non-decent’, a measure of housing quality.

Housing stability and security relate to the extent to which people have control over how long they live in their homes and how secure they feel. Housing instability can act as a stressor which can harm health. The imminent threat of eviction is associated with psychological distress, particularly for owner-occupiers (Taylor et al., 2007; Pevalin, 2009).

The impacts of different aspects of housing on health can be difficult to unpick. For example, living in the private rented sector is associated with worse biomarkers of health, but it is unclear whether this is due to the tenure's higher levels of insecurity, unaffordability, or poorer quality homes (Clair and Hughes, 2019).

Impact of Poor Housing for Different Groups

Not everyone has the same opportunity for good health throughout life. Inequalities in health (differences in health between groups of people and communities) arise because of the conditions in which we are born, grow, live, work, and age – from the support we receive during our early years to our living and working conditions and local communities throughout life. They influence our opportunities for good health and can either enable individuals and societies to flourish or not (The Health Foundation, 2017).

Poor housing plays a key role in driving health inequalities, with some groups of the population more likely to experience poor housing. The consequences of this for people's physical and mental health therefore fall unequally on these groups.

People in low-income households are more likely to be affected by housing problems, such as living in a home that is considered to be non-decent or overcrowded. They are also more likely to experience a higher housing cost burden. In 2018/19, 21% of those in the lowest income quintile spent more than a third of income on housing costs compared with only 3% of those in the highest income quintile (The Health Foundation, 2021). Data on the EU population indicates that in 2019 about a third of people at risk of poverty spent 40% or more of their household disposable income on housing (Eurostat, 2021).

Poor housing influences health throughout the life course, starting even before we are born. It can affect children's life chances, health, and wellbeing, and effects can be lifelong. For example, experiencing homelessness can lead to poor mental health for pregnant women and impact their physical health, making it harder for them to access good quality food to keep healthy. Evidence suggests homelessness and temporary accommodation during pregnancy are associated with an increased risk of preterm birth, low birth weight, poor mental health in infants and children, and developmental delay (Stein and Gelberg, 2000; Richards, et al., 2011).

Research on the impacts of bad housing on children's lives has shown that growing up in poor housing conditions increased the risk of severe ill-health and disability during childhood and early adulthood by up to 25% (Shelter, 2006). There are also mental health impacts for children who experience homelessness. Children living in temporary accommodation for over a year are three times more likely to experi-

ence anxiety and depression than children without that experience (Shelter, 2006). Frequent home moves are also associated with poor child mental health (Tinson and Clair, 2020).

Adolescence is a critical period for preparing for adulthood, but also for building the foundations for future health, such as good quality work and housing. But as a Health Foundation inquiry into the health and life chances of 12-24-year olds highlights, too many young people are living longer in poor quality, shorter-term rental properties and are being priced out of long-term homes (Jordan et al., 2019). These are a range of factors that can put young people at risk of ill health in later life. A recent FEANTSA report paints a similar picture in Europe (FEANTSA, 2021).

Ethnicity is another inequality in society. Housing problems are more prevalent among people from ethnic minority backgrounds. Analysis of an English survey showed that just under half of people from minority ethnic groups experienced a housing problem compared with just under a third of those of White ethnicity (The Health Foundation, 2021). Households headed by those from minority ethnic backgrounds are also more than twice as likely to experience two or more housing problems (The Health Foundation, 2021). Across many European countries, Roma communities face significant challenges in accessing good quality housing compared to the general population. For example, they are more likely to live in overcrowded households but less likely to have access to indoor tap water (European Commission, 2020).

Some of the worst health outcomes and health inequalities are experienced by people experiencing homelessness, with the mean age of death in England and Wales (which mainly includes people experiencing street based homelessness or using emergency accommodation at or around the time of death) is about 30 years lower than that of the general population (ONS, 2020). The longer a person experiences homelessness, particularly from young adulthood, the more likely their health and wellbeing will be at risk (Public Health England, 2019).

Unequal Impact of the Pandemic on Health and Health Inequalities Related to Housing

The COVID-19 pandemic has brought health inequalities into sharp focus and there is growing evidence that the stark differences in housing conditions may have contributed to the unequal impact that the pandemic has had on different groups in the UK (Abbs and Marshall, 2020). For example, living in overcrowded accommodation – which is more prevalent for those on lower incomes – may have contributed to the spread of COVID-19. More people living in the same household can increase the risk of infection and make self-isolation more difficult (Tinson, 2020).

The UK Government stay at home guidance and lockdown restrictions also quickly highlighted the importance of access to adequate indoor and outdoor space. Research carried out in June 2020 found that almost a third of adults in the UK experienced mental or physical health problems related to lack of space or the condition of their home during lockdown (National Housing Federation, 2020). Lack of adequate space has been a particular concern for young adults during lockdown, making it difficult to focus on studies or work, socialise, and access remote support (Leavey, 2020).

Taking Action Through a Complex Systems Approach

Our housing can therefore influence our health in many different ways throughout our lives and is intricately linked to other determinants of health, including our finances and our communities. In common with many public health challenges, housing and homelessness (the severe end of poor housing) are complex problems that form part of complex systems of multiple, interrelated factors that influence our health and our opportunities to live healthier lives. Complex problems do not have a single risk or causal factor, and they cannot generally be addressed through a focus on one aspect of behaviour or the environment. As such simple linear models of cause and effect are insufficient to create solutions for prevention. Instead, an understanding of the wider influences and the complex relationships between them is needed.

A complex systems approach conceptualises public health challenges such as poor health and health inequalities as outcomes of a range of interrelated factors within a connected whole. These factors affect each other, with changes potentially impacting throughout the system (Rutter et al., 2017). Developing a comprehensive understanding of the complex system from which public health challenges emerge – the interrelationships between the components within a system and system dynamics – can help identify multiple points of action and intervention to reshape the system and inform policy development (Marshall and Bibby, 2020).

A key step in understanding a system is to map out the components and the connections between these. Involving as many relevant stakeholders as possible, including people with lived experience in system mapping, is important in order to gather views from all parts of the system. Building a visual representation of a system around an issue in this way, with interconnections, pathways, and feedback loops, can provide insight to help policymakers, practitioners, and researchers make better informed decisions.

The system view can identify contextual factors that should be measured in evaluation to understand the context within which the intervention is effective and any potential barriers to its effectiveness (Marshall and Bibby, 2020). The UK Collaborative Centre for Housing Evidence has produced a checklist of questions to support systems thinking in housing research, policy, and practice (UK Collaborative Centre for Housing Evidence, 2019).

In addition to understanding the system, and careful and appropriate design of research, it is also important to effectively communicate with policy makers and commissioners to build understanding of systems approaches and translate evidence into action and achieve impact. This systems approach is currently being used by the Centre for Homelessness Impact to map the complexity of the homelessness system and help identify practical areas for policy and practice and what works in different parts of the system.

Conclusion

The relationship between housing and health is complex. Taking a complex systems approach – one that considers the multiple and interrelated ways in which housing influences health, and vice versa, and the factors that influence both, can help in understanding and addressing the inequalities in housing and in health and the links between these. Applying a systems approach involves building a shared understanding of the system of causes and consequences, using appropriate research methods including ongoing monitoring, and evaluation. The value of such an approach is in identifying what evidence exists, or not, in understanding the contextual factors that need to be in place for action to be as effective as possible. A systems approach can also help identify ways of assessing and understanding the broader consequences of actions – both intended and unintended – and the process that may lead to them (Marshall and Bibby, 2020). Therefore helping to identify where action is most needed, based on the evidence, and help shape policy.

► References

Abbs, I. and Marshall, L. (2020) *Emerging Evidence on COVID-19's Impact on Health and Health Inequalities Linked to Housing*. (London: The Health Foundation).

Centre for Homelessness Impact (2018) What we Talk About When we Talk About Systems. <https://www.homelessnessimpact.org/post/what-we-talk-about-when-we-talk-about-systems>

Clair, A. and Hughes, A. (2019) Housing and Health: New Evidence Using Biomarker Data, *J Epidemiol Community Health* 73 pp.256-262.

European Commission (2020) *EU Roma Strategic Framework for Equality, Inclusion and Participation for 2020-2030* (Brussels: European Commission).

Eurostat (2021) *Living Conditions in Europe – Housing*. Data extracted in April 2021. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Living_conditions_in_Europe_-_housing (accessed 8 Jul 2021).

FEANTSA and Abbe Pierre Foundation (2021) *Sixth Overview Of Housing Exclusion in Europe 2021* (Brussels: FEANTSA).

Jordan, M., Kane, M., and Bibby, J. (2019) *A Healthy Foundation for the Future: The Final Report from the Young People's Future Health Inquiry* (London: The Health Foundation).

Leavey, C., Eastlaugh, A., and Kane, M. (2020) *Generation Covid-19: Building the Case to Protect Young People's Future Health* (London: The Health Foundation).

Marshall, L. and Bibby, J. (2020) A Public Health Approach to Homelessness, in: L. Teixeira and J. Cartwright (Eds.) *Using Evidence to End Homelessness* pp.143-160. (Bristol: Policy Press).

Ministry of Housing, Communities and Local Government (MHCLG) (2020) *National Statistics: English Housing Survey 2018 to 2019: Sofa Surfing and Concealed Households – Fact Sheet*. <https://www.gov.uk/government/statistics/english-housing-survey-2018-to-2019-sofa-surfing-and-concealed-households-fact-sheet> (accessed 7 May 2021).

National Housing Federation (2020) *Poor Housing Causing Health Problems for Nearly a Third of Brits During Lockdown*. <https://www.housing.org.uk/news-and-blogs/news/poor-housing-causing-health-problems-for-nearly-a-third-of-brits-during-lockdown/> (accessed 7 May 2021).

Office of the Deputy Prime Minister (OPDM) (2004) *The Impact of Overcrowding on Health and Education: A Review of the Literature* (London: Office of the Deputy Prime Minister).

Official National Statistics (ONS) (2020) Deaths of Homeless People in England and Wales: 2019 Registrations. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsofhomelesspeopleinenglandandwales/2019registrations> (accessed 7 May 2021).

Pevalin, D.J. (2009) Housing Repossessions, Evictions and Common Mental Illness in the UK: Results From A Household Panel Study. *Journal of Epidemiology and Community Health*, *BMJ Publishing Group* 63(11) p.949.

Public Health England (2019) *Homelessness: Applying All Our Health*. <https://www.gov.uk/government/publications/homelessness-applying-all-our-health/homelessness-applying-all-our-health> (accessed 7 May 2021).

Raderman, W., Rogers, N.T., and Murray, E.T. (2021) Variations in Housing Affordability and Health Relationships by Measurement and Sub-Population Assessment, *medRxiv* 2021.02.03.21251094; doi: <https://doi.org/10.1101/2021.02.03.21251094>

Raisi-Estabragh, Z., McCracken, C., Bethell, M., Cooper, J., Cooper, C., Caulfield, M., Munroe, P., Harvey, N., Petersen, S. (2020) Greater Risk of Severe COVID-19 in Black, Asian and Minority Ethnic Populations is Not Explained by Cardiometabolic, Socioeconomic or Behavioural Factors, or by 25(OH)-Vitamin D Status: Study of 1326 Cases from the UK Biobank, *Journal of Public Health* 42(3) pp.451-460.

Richards, R., Merrill, R.M., & Baksh, L. (2011). Health Behaviors and Infant Health Outcomes in Homeless Pregnant Women in the United States, *Paediatrics* 128(3), 438-46.

Rodgers, S.E., Bailey R., Johnson R., Berridge, D., Poortinga, W., Lannon, S., Smith, R., and Lyons R.A. (2018) Emergency Hospital Admissions Associated with a Non-Randomised Housing Intervention Meeting National Housing Quality Standards: A Longitudinal Data Linkage Study, *J Epidemiol Community Health* 72 pp.896-903.

Rutter, H., Savona, N., Glonti, K., Bibby, J., Cummins, S., Finegood, D.T., Greaves, F., Harper, L., Hawe, P., Moore, L., Petticrew, M., Rehfuss, E., Shiell, A., Thomas, J., and White, M. (2017) The Need for a Complex Systems Model of Evidence for Public Health, *Lancet* 390(10112) pp.2602-2604.

Shaw, M. (2004) Housing and Public Health, *Annual Review of Public Health* 25 pp.397-418.

Stein, J.A., Lu, M., & Gelberg, L. (2000). Severity of Homelessness and Adverse Birth Outcomes, *Health Psychology*, 19(6) pp.524-534.

Shelter (2006) *Chance of a Lifetime – The Impact of Bad Housing on Children’s Lives*. https://england.shelter.org.uk/professional_resources/policy_and_research/policy_library/chance_of_a_lifetime_-_the_impact_of_bad_housing_on_childrens_lives
[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(17\)31267-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)31267-9/fulltext) (accessed 7 May 2021).

Taylor M.P., Pevalin D.J., and Todd J. (2007) The Psychological Costs of Unsustainable Housing Commitments, *Psychol Med* 37(7) pp.1027-36.

The Health Foundation (2017) *What Makes us Healthy?* (London: The Health Foundation).

The Health Foundation (2021) *Evidence Hub: What drives health inequalities?* (London: The Health Foundation).

Tinson, A. (2019) *From Low Quality Homes to Insecure Tenancies: How Housing Harms Health is Changing* (London: The Health Foundation).

Tinson, A. (2020) *Overcrowding is Highest for those with Low Incomes* (London: The Health Foundation).

Tinson, A. and Clair, A. (2020) *Better Housing is Crucial for our Health and the Covid-19 Recovery* (London: The Health Foundation).

UK Collaborative Centre for Housing Evidence (2019) *Housing and Systems Thinking: Working Paper*. https://housingevidence.ac.uk/wp-content/uploads/2019/07/Housing-and-Systems-briefing-paper_final_170704.pdf (accessed 7 May 2021).

