

Focus Article

Stuck at home in a cold home: the implications of Covid-19 for the fuel poor

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Abstract

Policies to address the impact of Covid-19 on low income energy consumers have rightly focussed on energy bills, particularly in the context of home confinement and increased energy consumption. In the longer term, however, we need policies to improve home energy standards. The evidence shows that higher standards reduce the risk of getting a respiratory illness, improve the health of those already with a respiratory illness, improve the ability of our immune systems to fight off illness and reduce the use of health services.

Keywords: fuel poverty; Covid-19; cold homes; energy costs; health.

Home confinement and energy bills

While total energy consumption has declined due to shutting down large sections of the economy, domestic consumption has increased. Uswitch estimates that home confinement will cost the average energy consumer an extra £16 per month (Uswitch, 2020). This is due to putting the heating on when it wouldn't usually be, using extra gas and electricity for cooking, making cups of tea and increased use of televisions and computers. These costs are likely to be higher for people living in homes with poor energy standards. Even in normal circumstances, it costs £2,000 per year more to heat a home rated EPC G to adequate standards than a home rated EPC C or above (BEIS, 2019a).

The Government, Ofgem and the energy industry recently reached an agreement to support low income consumers (BEIS, 2019b). With respect to the 4 million prepayment meter consumers, many of whom may be struggling to keep their meters in credit, supplier support can include adding discretionary credit or sending a pre-loaded top up card. For other consumers in financial distress, supplier support may include debt repayments or reassessment of bill payments, reduced or paused where necessary. Disconnection of credit meters is completely suspended.

Welcome as these measures are, suppliers still expect consumers to repay the amounts owed. Many low income consumers will be anxious about how they can afford

the extra energy costs entailed by home confinement. Many will try to cope by rationing their fuel use. The recent advent of warmer weather and therefore lower heating requirements may help reduce these concerns (although other energy requirements will remain high). However, they will inevitably rise again this winter with the number of households in fuel poverty also likely to swell, given the rapid growth in job losses.

The implications for people suffering from Covid-19, particularly those with existing respiratory conditions, are even more serious. A brief review of the evidence on the association between cold homes and respiratory illness suggests there are important lessons for long term policy.

Cold homes and respiratory illness

Cold homes greatly increase the likelihood of damp or mould growth. NEA's '*Under one roof*' gives a useful overview of their association with respiratory illness (Ruse and Garlick, 2018). Damp and mould are associated with a 30-50 per cent increase in respiratory problems. Children in cold homes are more than twice as likely to suffer from asthma or bronchitis than children in warm homes. Studies also show a strong dose-response relationship between the severity of damp and the severity of respiratory obstruction. Cold homes and unaffordable fuel bills also have a significant deleterious impact on mental health (Liddell and Guiney, 2015), which home confinement will inevitably exacerbate.

There is also evidence that improving warmth in the homes can have a positive impact on people with respiratory conditions (and on other health conditions, particularly mental health). A health impact assessment of the Nest energy efficiency scheme in Wales, for example, found that for those receiving help, the number of GP visits by people with respiratory conditions decreased by four per cent, compared to a ten per cent increase for those not receiving help (Welsh Government, 2019). The difference was even greater for those with asthma.

A Cochrane systematic review of the impact of housing improvements on health found that 'housing investment which improves thermal comfort in the home can lead to health improvements, especially where targeted at those with chronic respiratory disease' (Thomson et al., 2013). Milner & Wilkinson's review of the impact of energy efficiency and heating improvements found an association with improvements in respiratory and other chronic illness, reduced contact with health services and that for some target groups, e.g. children with asthma, the interventions were justified in their own right for managing clinical conditions (Milner and Wilkinson, 2016).

Warm homes and Covid-19

One of the striking features of Covid-19 is the extreme variation in its impact on people. Some may carry the disease without suffering any symptoms, others get relatively mild symptoms, while for some, the impact is substantial, including death in the worst cases. People with existing respiratory problems are more likely to fall in the last group (NHS, 2020). An important factor appears to be the ability of individuals' immune systems to fight off the illness. While there is no specific evidence to date on whether warm homes can contribute to tackling Covid-19, the evidence suggests warm homes can play an important role in tackling respiratory illness in general:

- Warm homes enable immune systems to better fight off viruses
- Warm homes may improve the likelihood of people with viruses only suffering 'mild' symptoms (a wide range of other factors will also influence this); and
- Warm homes are likely to help improve the recovery process for those returning from hospital after receiving treatment for the virus (as is the case for many other illnesses).

This reinforces the importance of putting every effort into making sure people can afford their energy bills. It implies immediate help with fuel bills for those on low incomes and those with existing health conditions, particularly respiratory illness - help that will need to be ramped up this winter, given the likely growth in fuel poverty. Schemes that only defer payment may not reassure people struggling to pay their fuel bills that they should keep the heating on.

In the longer term, we should improve home energy standards such that low income households, particularly those with respiratory and other illnesses, can enjoy warm, healthy homes and affordable fuel bills. Initiatives such as the Irish Government's Warm and Wellbeing scheme, which is targeted at people with respiratory conditions, seem remarkably prescient in this respect (SEAI, 2020).

A major home energy standards improvement programme will take some time to get off the ground, particularly given that 'normal service' is not likely to resume for quite some time. It is therefore only likely to play a limited role in the armoury of anti-Covid 19 measures. Nevertheless, there is evidence that Covid-19 will result in many people suffering long term damage to their respiratory systems (WHO, 2019). It is also possible that mutations of the virus, albeit less aggressive than Covid-19, will emerge in the future (Broyd, 2020).

Government policies to improve home energy standards

The Conservative 2019 general election manifesto promised a £2.5bn 'Home Upgrade Grant' scheme and a £3.8bn social housing decarbonisation scheme (Conservative Party, 2019). The new Government's 2020 Queen's Speech reaffirmed this commitment. Many therefore expected a significant announcement in the March 2020 budget. Not surprisingly, there was widespread disappointment when this didn't materialise. Yes, money had to be found for tackling Covid-19 but £30bn was still earmarked for a massive road-building programme. It is hard to understand why roads should take priority over keeping millions of people warm and healthy in their homes.

Covid-19 has focussed minds on the appalling impacts of virus epidemics on people's health. But it should also remind us of the hardship and lives lost every year through cold homes, which Covid-19 is likely to exacerbate. The Government has had to commit vast sums of money to tackling a huge public health crisis. But when the dust settles, the Government will need to reassess its priorities for action in the post Covid-19 world. Surely, a programme to make sure our homes are warm, healthy and affordable to heat and power should be right up there?

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References

- BEIS (2019a) *Annual fuel poverty statistics report, 2019 (2017 data)*. London: Department for Business, Energy & Industrial Strategy (BEIS). Available at: www.gov.uk/government/statistics/annual-fuel-poverty-statistics-report-2019
- BEIS (2019b) *Government agrees measures with energy industry to support vulnerable people through COVID-19*. London: Department for Business, Energy & Industrial Strategy (BEIS). Available at: www.gov.uk/government/news/government-agrees-measures-with-energy-industry-to-support-vulnerable-people-through-covid-19
- Broyd, N. (2020) *COVID-19: UK Scientists Track Genetic Code and Mutations*. Available at: www.medscape.com/viewarticle/927313
- Conservative Party (2019) *Conservative 2019 manifesto*. Conservative Party.
- Liddell, C. and Guiney, C. (2015) Living in a cold and damp home: frameworks for understanding impacts on mental well-being. *Public Health*, 129, 3, 191-199.
- Milner, J. and Wilkinson, P. (2016) Effects of home energy efficiency and heating interventions on cold-related health. *Epidemiology*, 28, 1, 1.
- NHS (2020) *Advice for people at higher risk of Coronavirus (Covid-19)*. Available at: www.nhs.uk/conditions/coronavirus-covid-19/advice-for-people-at-high-risk/
- Ruse, J.I. and Garlick, K. (2018) *Under one roof*. Newcastle-Upon-Tyne: NEA.
- SEAI (2020) *Warmth and wellbeing pilot scheme*. Available at: <https://www.seai.ie/grants/home-energy-grants/free-upgrades-for-eligible-homes/warmth-and-wellbeing/>
- Thomson, H., Thomas, S., Sellstrom, E. and Petticrew, M. (2013) Housing improvements for health and associated socio-economic outcomes. *Cochrane database of systematic reviews*. DOI: 10.1002/14651858.CD008657.pub2.
- Welsh Government (2019) *The impact on health of the Welsh Government's Warm Homes Schemes*. Cardiff: Welsh Government.
- WHO (2019) *Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19)*. Available at: www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf
- Uswitch (2020) Stay-at-home Britons could spend an extra £52 million a week on energy bills. *Uswitch press release*, 24th March 2020. Available at: www.uswitch.com/media-centre/2020/03/stay-home-britons-spend-extra-52-million-week-energy-bills/