What we know
The causes of fuel poverty are multifactorial and include: the energy efficiency of the home, household income, debt, benefits take-up, fuel costs and climate. Fuel poverty does not occur in isolation and may be experienced alongside many other aspects of poverty, but how these cluster together in the population is unclear. Poor housing conditions, including homes that are cold or damp, have been associated with physical health problems and increasingly with psychological distress. However, it is not clear to what extent associations with general psychological distress also hold true for common mental disorders of sufficient severity to require health care services and treatment.

If left untreated, common mental disorders such as anxiety and depression are more likely to lead to long term disability and premature mortality: their financial and social cost to society is high. Reducing their prevalence has been a key public policy goal for successive governments.

Looking at a range of aspects of fuel related poverty
The Adult Psychiatric Morbidity Survey (APMS) 2007 is part of a survey series that provides the national estimates of community rates of psychiatric disorder in England. The 2007 survey included questions on diverse aspects of fuel related poverty including: self-perceived cold housing, mould in the home, cutting back on fuel usage due to cost and fuel related problem debt or disconnection, alongside questions about characteristics of the property (such as extent of heating and double glazing).
Participants were asked whether, in the last year, they had had any doctor diagnosed physical health complaints requiring treatment. Questions also assessed their level of functional impairment with different activities of daily living (disability) and they were assessed for common mental disorders (including depression and anxiety) using a full diagnostic schedule.

**Insights from a multidimensional approach**
Taking a multidimensional approach to fuel related poverty illustrates how different groups of people in society experience quite different aspects of fuel related poverty. For example:

- People living in flats were worse off than those in other types of dwelling unit. However, those in *purpose built* flats manifested financial aspects of fuel related poverty (reducing their fuel use and experiencing fuel debt), while those in *conversions* had worse housing conditions (presence of mould and lacking central heating).

- There was a similar pattern in the association with housing tenure. People who rent their homes were worse off than owner occupiers: but for *private renters* this is evident in poor housing conditions and for *social renters* it was experienced more in terms of living in a cold home and reducing fuel use.

Having a cold home contributes to social isolation and may be associated with stigma. The room in the property that was most likely to be cold was the living room. A quarter of people with a cold home reported reluctance to invite people home as a result. This is important because maintaining a social network is a key predictor of positive mental health.

**Lone parent households at risk**
Older people living alone fared worse than those living as a couple. This may be linked to the observation that female-headed households tended to fare worse than male-headed households.

A quarter of lone parent households, also often female, reduced their fuel use due to worries about cost. Disabled people also had particularly high rates of experiencing all the aspects of fuel related poverty asked about. These associations support calls to extend the Winter Fuel Payment to other vulnerable households.
Lone occupants under the age of 60 were also identified as a vulnerable group. The subjective nature of the aspects of fuel related poverty measured and the inclusion of fuel related debt as a variable may explain why this younger group emerged as an ‘at risk’ category.

**Wider social policy must tackle both debt and low income**

Latent class analysis is a form of statistical modelling that identifies groups of people in the population who share related characteristics. This approach identified four distinct groups who share a similar profile in terms of different poverty indicators. Three of these groups were characterised by specific and adverse financial strain contexts.

- Two groups were marked by severe debt problems: this highlights the need for financial management skills, and for proper funding of debt counselling services like the Citizens Advice Bureaux.
- Two groups were marked by an extremely low household income, indicating the ongoing need for income maximisation strategies. In particular, benefit take up was lower than it should have been (given income levels) in the group with higher debt.
- One group comprised almost entirely of unemployed people with no qualifications, highlighting the relevance of broader social initiatives in employment-focused training.

**A separate focus on heating efficiency and mould also essential**

However, even after controlling financial circumstance living in a home that is cold independently predicts both poor physical health and poor mental health. This demonstrates that while income maximisation and debt support schemes are essential, so too are programmes such as Warm Front that focus specifically on improving home heating and insulation efficiency.
Mould also independently predicts poor mental and poor physical health. Therefore, while insulating homes is a priority, this must include proper ventilation if an increase in the health conditions associated with mould is to be avoided. This is all the more important given that this study found that presence of mould is by far the highest in households with children. Interventions aimed at tackling mould would do well to target this group.

**In conclusion**

It is not possible from these data to determine direction of causality or the precise mechanisms by which different aspects of fuel related poverty may exert a negative impact on physical or mental health. However, this report does highlight that fuel related poverty is a key public health issue requiring a multifaceted and cross-sector approach.

**National Centre for Social Research**

The National Centre for Social Research is a not-for-profit research institute. We carry out high quality large scale social surveys for Government and research councils. Through a research grant from the eaga Charitable Trust, researchers at NatCen were able to collaborate with built environment experts at UCL’s Energy Institute (including Professor Tadj Oreszczyn) and experts in health and mental health epidemiology (such as Professors Howard Meltzer and Rachel Jenkins) to explore one such dataset.

**Data source**

The Adult Psychiatric Morbidity Survey (APMS) is the primary source of statistics on England’s mental health. The 2007 survey included questions on housing conditions and financial circumstances.

**For more information**

The full report can be downloaded from the eaga Charitable Trust [www.eagacharitabletrust.org](http://www.eagacharitabletrust.org) and NatCen [www.natcen.ac.uk](http://www.natcen.ac.uk) websites.

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