Faculty of Public Health
of the Royal Colleges of Physicians of the United Kingdom
Working to improve the public's health

Fuel Poverty & Health

Briefing Statement

Introduction

Living in a cold home can increase the likelihood of ill health, including hypertension, heart disease, stroke, influenza and asthma. In the UK, around 1.2 million households are in fuel poverty[1]: that is, if in order to maintain a satisfactory temperature throughout the house, it is required to spend more than 10% of its income on heating.[1,2] Of those who suffer fuel poverty, one million of these are in vulnerable groups, including[1]:

- older people, particularly those living alone;
- households containing children (especially very young children), including lone parents;
- people with disabilities;
- people with long term illness;
- single person households.

Fuel poverty involves a complex interplay of factors such as:[2]

- energy efficiency of the property (including inefficient or absent heating systems);
- energy costs (including the cost of heating the property);
- household income;
- household composition (under-occupancy increases the likelihood of fuel poverty);
- housing tenure; and
- external environment.

Another determinant in fuel poverty is access to energy supplies. In Wales, as many as 47,000 households have no access to mains gas.[2]

Tackling fuel poverty can help save lives; prevent ill-health; reduce admissions (and re-admissions) to hospital (as well as length of stay) – ultimately reducing costs to the NHS – particularly crucial at a time when budgets are under immense pressure. Although isolated examples of good practice exist, the health service is yet to fully engage with the issue of fuel poverty. Cross-governmental and sectoral work on fuel poverty has seen numbers of households in fuel poverty fall. However, there is still a long and difficult way to go (given the continued rise in energy costs), and efforts must be augmented by mainstreamed practice within the NHS if targets (see p.2) to eradicate

fuel poverty are to be achieved, and the health and well-being of those at risk, protected.

Given also the prominence of the energy efficiency agenda, which seeks primarily to reduce the UK's levels of carbon dioxide emissions, it is therefore critical that initiatives to tackle fuel poverty are closely integrated with action on improving household energy efficiency.

Evidence

Excess winter deaths

It is estimated that, each year, around 40,000 more people die in winter (December to March) in the UK than would be expected from death rates occurring over the rest of the year.[2] Over half of these deaths are from cardiovascular and circulatory disease (mainly heart attacks and strokes) and a third from respiratory disease. Influenza, in non-epidemic years, only accounts for approximately one tenth of the deaths and hypothermia causes less than 500 deaths.[4,5]

For every one degree Celsius that the outdoor temperature falls below the winter average, there are 8,000 extra winter deaths.[2] There is a concomitant rise in morbidity with worsening asthma and chronic obstructive pulmonary disease rates, increased blood pressure and risk of heart attack and strokes, worsening arthritis, increased accidents at home and impaired mental health.

Excess winter deaths are largely preventable if people are able to:

- keep warm indoors (combination of adequate heating, insulation and ventilation – going from a cold home into cold outdoors increases cardiovascular stress than if leaving a warm home);
- keep warm outdoors (sufficiently warm clothes and physical activity, such as walking);
- ensure uptake of other preventative measures such as flu vaccination where appropriate.

Energy efficiency

A house built as recently as 2000 is 40% less energy efficient than one built to current revised standards.[6] Measures such as cavity wall and loft insulation can greatly increase the energy efficiency of a house. However, many older properties do not have cavity walls. Other simple measures to improve energy efficiency include draught proofing doors and window frames; it is estimated that as much as 20% of heat loss in an average home is through ventilation and draughts.[7]

Failure to provide adequate thermal comfort is the most common reason for failing to meet the Decent Homes Standard in England.[8] In Scotland, a staggering 70% of housing does not meet the Scottish Housing Quality Standards, with 60% failing to meet energy efficiency targets.[9] Decent Homes Standards (which cover England, Wales and Northern Ireland) are augmented by the Housing Health and Safety Rating System which will be used to assess potential hazards in the home, such as damp (see under Department for Communities and Local Government, Useful Organisations p.6). The Energy Efficiency Commitment also sets targets for electricity and gas suppliers on the promotion of improvements in domestic energy use to help combat fuel poverty and carbon dioxide emissions.

Energy costs

High energy costs coupled with dwellings which are energy inefficient drives the cost of heating a home. The Fuel Poverty Action Group (see Policy Context p.3) predicted that if energy prices continue to rise then the number of vulnerable households in fuel poverty will increase by 200,000 by 2010 – the deadline by which all vulnerable groups should be lifted out of fuel poverty.[10] The Energy Retail Association, which represents Britain's major energy suppliers, has committed (following pressure from Ofgem – the regulator for the gas and electricity industries) to not disconnecting vulnerable customers should they fall behind with payments.

Housing tenure and composition

There are similar rates in fuel poverty in the private and social housing sectors in both England and Scotland. In Northern Ireland (where one in three houses suffer fuel poverty) and Wales, social housing accounts for the majority of households in fuel poverty.[8,11,12,13] The National Grid is working in partnership with government and key agencies, through its Affordable Warmth Programme, to install efficient gas central heating systems in one million homes in the social housing sector in order to reduce fuel poverty.

By far the largest group at risk of fuel poverty are those who live alone – particularly older people – and those living in a larger property are more likely to heat only those rooms that they occupy.

* Usually 21 degrees for the main living area and 18 degrees in other occupied rooms.[3]

Rural areas

Rural areas can be at increased risk of fuel poverty from:

- reduced access to mains gas network
- high levels of older housing without cavity wall insulation, or detached houses (leading to increased heat loss)
- those on below average incomes are more likely to be without central heating[14]

The Design and Demonstration Unit – a group of private sector secondees based within the Department of Trade and Industry – have undertaken a number of projects looking at ways in which the private sector can help communities without access to the gas network.

Inequalities

Fuel poverty is an issue of inequalities, and households with low incomes are amongst those groups most at risk from fuel poverty; heating the home may compete with other important living costs such as ensuring a good nutritional diet.

Fuel poverty can limit a person's engagement and participation in society, leading to social isolation and exclusion – with a detrimental effect on both physical and mental health. Children growing up in cold homes may experience health problems (through increased respiratory infections or, particularly, for those children who suffer asthma) and educationally, through poor concentration, leading to poor educational achievement.

In Northern Ireland, 67% of lone parent families live in fuel poverty and 52% of fuel poor households were headed by a person with a disability or long term illness.[13]

It is clear therefore that strategies to address inequalities are important to tackling the causes of fuel poverty, and vice versa.

The role of the NHS

The NHS has a vital role to play in tackling fuel poverty. Frontline staff are in a prime position to identify those at risk, and to refer people on to appropriate organisations who can advise on possible grants/benefits entitlements. In addition to referring individuals to organisations who can provide further advice, staff can also encourage individuals to accept help. This is important as older people – who are most at risk from living in cold homes – can also be the least likely to accept assistance. It is vital that the NHS works in partnership with colleagues in other primary care services, social services departments, the voluntary sector, and grant giving bodies to ensure that contact is made and maintained with those identified at risk of experiencing fuel poverty.

The NHS has much to gain by tackling fuel poverty. Not only will the overall health of residents be improved but, by decreasing excess winter mortality and morbidity, both primary and secondary care will suffer less in terms of winter pressures on their resources. It is therefore imperative that initiatives to tackle fuel poverty are mainstreamed within the NHS.

Policy context

There are a number of government health policies designed to address, directly and indirectly, the issue of fuel poverty. An extensive list of relevant policy documents can be found in *Fuel Poverty and Health.*[2] However, key policy documents include:

UK Fuel Poverty Strategy:[15] aims to eradicate fuel poverty for 'vulnerable households' by 2010 and in all households by 2016. Measures include: programmes to improve energy efficiency of fuel poor households; engagement with energy industry to develop initiatives to tackle fuel poverty and tackle the wider agenda of social and health inequalities. *Fuel Poverty Advisory Groups* have been established by each of the devolved administrations to monitor progress and advise on the implementation of fuel poverty strategies. The Fuel Poverty Advisory Group for England advises that 2010 targets can only be achieved if action is taken by government and Ofgem to secure reductions in, and prevention of, high energy prices.[10] Progress reports and updates are also produced by the devolved administrations.

England: *Fuel Poverty in England:* the Government's Plan for Action[16] sets out the government's plan to tackle fuel poverty, primarily through the Warm Front Programme. It describes how the scheme will be extended and improved to maximise its effectiveness and impact. Decreasing excess winter mortality and morbidity, in both primary and secondary care, will also help PCTs achieve many of the targets in the National Service Frameworks for Coronary Heart Disease, Older People and Diabetes (see under Department of Health, Useful Organisations p.6).

Scotland: the *Scottish Fuel Poverty Statement*[17] sets out the Scottish Executive's plans to eradicate fuel poverty by 2016. However, the Scottish House Condition Survey showed a rise in the number of households living in fuel poverty from 13% (in 2002) to 14.5% in 2003-04.[12]

Northern Ireland: Ending Fuel Poverty: a Strategy for Northern Ireland[13] takes a holistic approach to tackling fuel poverty; it forms part of the government's strategy to fight poverty as a whole. The Housing Executive's Annual Progress Report also reports on progress on action to tackle fuel poverty in Northern Ireland.[18]

Wales: the Welsh Assembly Government set out its commitment to tackling fuel poverty, including a target of lifting 95,000 households out of fuel poverty by 2007.[1] However, this looks increasing challenging due to the increasing costs of helping homes in fuel poverty.

Recommendations

The most effective and sustainable means of making homes less expensive to heat (aside from keeping energy costs low) is to improve the energy efficiency of the home, such as installing central heating, or cavity wall and loft insulation – which may cut fuel bills by up to 35% and 20% respectively. There are a number of organisations, including local councils and energy companies, which provide advice and financial assistance to help with these measures (see Table below).

However, about 20% of households approached refused energy efficiency advice/measures.[17]

In addition to identifying potentially vulnerable groups at risk of fuel poverty, innovative ways must therefore be sought to engage those households where, once identified, refuse assistance.

The NHS is ideally situated to innovate and implement these strategies, particularly at local level. Fuel Poverty and Health[2] provides practical advice for primary care organisations and public health and primary care professionals on tackling fuel poverty at local level. The following key recommendations can help local teams to implement strategies to tackle fuel poverty at local level:

Establish a local Fuel Poverty Action Team to bring together key partners including health services, local authorities, voluntary organisations and local energy suppliers, to develop and implement a local strategy.

Appoint a local Fuel Poverty Champion to spearhead local action and drive forward implementation of a local fuel poverty strategy.

Develop a local Fuel Poverty Strategy. Key elements include:

- undertaking an audit of local needs to identify service gaps, vulnerable groups, available grants/support etc;
- ensuring all local statutory organisations (such as primary and social care organisations, local authorities) and partnerships include action on tackling fuel poverty within their various organisational strategies (this could provide a means of accessing additional resources, providing sustainability);

Organisations providing grants and financial assistance	
England:	**Warm Front – provides package of insulation measures for eligible households. Maximum grant £2,500.**
Scotland:	**Warm Deal – provides insulation to eligible low income households and pensioners. Maximum grant £500.**
	Central Heating Programme – provides free central heating systems to pensioners, local authority and housing association households without central heating or broken systems.
Wales:	**Home Energy Efficiency Scheme – similar to Warm Front but with wider eligibility, including lone parents. Maximum grant £2,700.**
Northern Ireland:	**Warm Homes – available to private sector households, including owner-occupiers. Maximum grant £2,700.**
Energy Efficiency Commitment Programmes:	**administered by Ofgem and runs throughout UK with aim to promote energy efficiency and offer free advice via a network of Efficiency Advice Centres.**
Local authorities	
Local energy suppliers	

See Grants and Useful Organisations (p.6) for further information.

* Eaga – the Energy Action Grants Agency

- raising awareness and provide training for front-line staff including health visitors, GP practice and district nurses – who are all ideally situated to identify people at risk or suffering from fuel poverty. Patients should then be referred by NHS staff, via a referral network (see below), to those organisations providing grants. An information pack could also be sent as follow-up. Fuel Poverty and Health provides a checklist to help identify those at risk or suffering fuel poverty.[2]
- raising awareness in the local community, particularly amongst vulnerable or at risk groups, such as older people. Information on recognising signs of fuel poverty, its health effects, how to keep warm and how to access grants/advice could be sent, for example, via invites for flu vaccinations. Information posters (such as those contained in Fuel Poverty and Health[2]) could be displayed in GP surgeries and hospital waiting rooms. Adverts in the local press or on radio could also help to raise awareness and hard-to-reach groups.
- working with local authorities to ensure that new-build properties across tenures meets decent homes standards, and tackling landlords who refuse to allow work to be carried out on their properties (even when it is at no cost to themselves).

Develop a referral network providing a single access point – for either local residents or staff acting on their behalf – to advice, information and grants to make their home more energy efficient/warmer. Individuals should also be offered a benefits check to ensure they are receiving their full entitlements, such as winter fuel payments.

Other considerations

Fuel poverty is one aspect of remaining well in winter. It is also important that residents:

- receive their annual flu immunisation;
- eat a nutritious diet;
- take exercise;
- wear appropriate clothing when outside; and
- stop smoking.

Primary care organisations and local authorities are already carrying out extensive work in these areas and it is essential that the work is coordinated with initiatives designed to counter fuel poverty. The Department of Health in England's annual Keep Warm, Keep Well campaign (see Useful Organisations p.6) produces an excellent booklet which highlights the health advice and provides a directory of useful organisations.

Faculty of Public Health: has produced, in association with the National Heart Forum, the Eaga Partnership, Help the Aged and the Met Office, the Fuel Poverty and Health Toolkit.[2] It aims to improve quality of life through preventing avoidable winter deaths and reducing strain on the NHS. It is a practical tool for strategic planners, healthcare professionals to devise and implement appropriate strategies for local communities to tackle fuel poverty.[2] The Faculty President also chairs the national Health, Housing and Fuel Poverty Forum (co-ordinated by UKPHA) to bring together members of the health community to highlight the issue of fuel poverty and mainstream good practice in the NHS. The Faculty continues to advocate, in partnership with other organisations, on fuel poverty, and has collaborated with the Met Office to highlight the numbers of avoidable winter deaths as a result of fuel poverty. This briefing statement forms part of the Faculty's strategy of continuing to highlight the need for action to tackle fuel poverty.

References

1. Department for Environment, Food and Rural Affairs, and Department of Trade and Industry. 2005. **UK Fuel Poverty Strategy. Third Annual Progress Report**. London: DEFRA and DTI
2. National Heart Forum, Eaga Partnership Charitable Trusts, Faculty of Public Health Medicine, Help the Aged and Met Office. 2003. **Fuel Poverty and Health – a Guide for PCOs, and Public Health and Primary Care Professionals.** London: National Heart Forum
3. Department of Trade and Industry. **Fuel Poverty**. Accessed on 16 May 2006 from: www.dti.gov.uk/energy/fuel-poverty/index.html
4. Wilkinson P, Landon M, Stevenson S. 2000. **Housing and Winter Deaths:** Epidemiological Evidence. In Rudge J, Nicol F (eds). Cutting the cost of cold. London E@FNSpon
5. Curwen M. **Excess Winter Mortality: a British Phenomenon?** Health Trends 1990/91; 4:169-75
6. Office of the Deputy Prime Minister. 2005. **Proposals for Introducing a Code for Sustainable Homes – a Consultation Paper.** West Yorkshire: ODPM
7. Energy Saving Trust. **Draught Proofing.** Accessed on 15 May 2006 from: www.est.org.uk/myhome/insulation/draughtproofing
8. Office of the Deputy Prime Minister. 2006. **English House Condition Survey – 2004 Headline Report Decent Homes and Decent Places.** West Yorkshire: OPDM
9. Scottish Executive. **Continuous Scottish House Condition Survey Report.** Accessed on 15 May 2006 from: www.scotland.gov.uk/news/releases/2006/03/31094021
10. Fuel Poverty Advisory Group (for England). 2006. **Fourth Annual Report 2005.** London: Department of Trade and Industry
11. National Energy Action and Energy Action Scotland. 2005. **Separate and Unequal. Energy Efficiency Standards in Social Housing in the UK. Third Year Report.** Newcastle: National Energy Action
12. House Condition Surveys Team. 2005. **Scottish House Condition Survey. Key Findings for 2003-04.** Edinburgh: Scottish House Condition Survey

13. Department for Social Development. 2004. **Ending Fuel Poverty: a Strategy for Northern Ireland.** Belfast: DSDNI
14. Harrop A, Palmer G on behalf of the Countryside Agency. 2002. **Indicators of Poverty and Social Exclusion in Rural England: 2002.** London: New Policy Institute
15. Department for Environment, Food and Rural Affairs, and Department of Trade and Industry. 2001. **UK Fuel Poverty Strategy.** London: DEFRA and DTI
16. Department for Environment, Food and Rural Affairs. 2004. **Fuel Poverty in England: the Government's Plan for Action.** London: DEFRA
17. Scottish Executive. 2002. **Scottish Fuel Poverty Statement.** Edinburgh: Scottish Executive
18. Northern Ireland Housing Executive. 2005. **Home Energy Conservation Report 2005.** Northern Ireland: NIHE

Grants and other services

Eaga Partnership Charitable Trust manages, on behalf of government and devolved governments, the main grant-giving initiatives in the UK. Information on grants is available from the Eaga website: **www.eaga.co.uk** or by calling:

Warm Front (England) t: 0800 316 6011

Warm Deal (Scotland) t: 0800 072 0150

Central Heating Programme (Scotland) t: 0800 316 1653

Home Energy Efficiency Scheme (Wales) t: 0800 316 2815

Warm Homes (Northern Ireland) t: 0800 181 667

Priority Services Register

A scheme run for eligible domestic consumers of gas and electricity offering a range of free, optional services available from energy providers.

w: www.energywatch.org.uk/help_and_advice/freeservices
t: 0845 906 0708

Energy Efficiency Commitment Programmes – run by Ofgem

w: www.ofgem.gov.uk (or contact your local energy supplier)

Department of Health (England)

Winter Warmth Advice Line t: 0800 085 7000

Useful Organisations

Affordable Warmth Programme

Working to reduce fuel poverty in one million social households.

w: www.affordablewarmth.co.uk t: 0121 424 8150

Department for Communities and Local Government (previously Office of the Deputy Prime Minister)

Includes links to the Housing Health and Safety Rating System, and Decent Homes Standard

w: www.odpm.gov.uk

Department of Health (England)

Includes links to National Services Frameworks and Keep Warm, Keep Well initiative

w: www.dh.gov.uk

Department of Work and Pensions

Provides information on benefits available

w: www.dwp.gov.uk t: 020 7712 2171

Energy Action Scotland

Working to reduce fuel poverty

w: www.eas.org.uk

Energy Advice Centres

w: www.est.org.uk (for list of local centres see under 'Local Advice') t: 0800 512 012

Energy Efficiency Partnership for Homes

Partnership working across sectors to tackle fuel poverty

w: www.est.org.uk/partnership/about

Energy Retail Association

Offices advice on fuel poverty

w: www.energy-retail.org.uk

Energy Savings Trust

Aims to achieve sustainable and efficient use of energy for households and businesses, UK-wide

w: www.est.org.uk t: 020 7222 0101

Energy Watch

Includes links to EnergySmart – providing advice on how to save energy and money

w: www.energywatch.org.uk

Health, Housing and Fuel Poverty Forum

Hosted by UKPHA

w: www.ukpha.org.uk

Help the Aged (UK-wide)

w: www.helptheaged.org.uk t: 0808 800 6565

National Energy Action (UK-wide)

Works to develop/promote energy efficiency services, focus on low-income households, campaigns to eradicate fuel poverty

w: www.nea.org.uk t: 0191 261 5677

National Heart Forum

w: www.heartforum.org.uk

Ofgem

Regulator for the gas and electricity industries

w: www.ofgem.gov.uk

Scottish Energy Efficiency Office

Provides information to consumers/business on energy efficiency and grants

w: www.energy-office.org t: 0141 242 5835

Warmer Houses, Healthier Homes

National campaign to tackle fuel poverty

w: www.warmerhealthyhomes.org.uk

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Summary

This briefing outlines the health problems associated with fuel poverty. It highlights those groups most at risk of fuel poverty and the role health professionals can play in identifying and helping those at risk. It is not intended as an exhaustive resource but as a signpost to other key resources as a next step to understanding and tackling this complex issue.