

C|A|R|D|I **GRANTS**
PROGRAMME

Research Brief

**Understanding fuel
poverty in the older
population**

Ageing population - ROI

- At the 2006 census, there were 468,000 people aged 65+ (11% of the population).
- By 2041, there will be 1.4 million aged 65 and over (22% of the population).
- Life expectancy is 76.8 years for men and 81.6 years for women.
- 95% of men and women aged 70 and over rate their health as very good (19%), good (50%) or fair (26%).
- 9.1% of people aged 65 and over are still in employment (Q2 2009).

Ageing population - NI

- In 2008, there were 248,500 people aged 65+ (14% of the population).
- In 2041 the 65+ age group is projected to make up 24% of the population.
- Life expectancy is 76.3 years for men and 81.3 years for women.
- 66% of people aged 70 and over rate their health as good (25%) or fairly good (42%).
- 9% of men aged 65 and women aged 60+ are still in employment (Q2 2009).

Policy on fuel poverty - ROI

- The Programme for Government introduced following the general election in 2011 committed to a new fuel poverty strategy for ROI. It is due to be published in Q4 2011.
- A new Positive Ageing Strategy which will set the direction for all policy making for the older population is due to be published in late 2011.
- The National Action Plan for Social Inclusion 2007-2016 outlines several measures to reduce fuel poverty.
- The government has an action plan to increase energy efficiency by 20%, laid out in the National Energy Efficiency Action Plan (2009).

Policy on fuel poverty - NI

- Warmer Healthier Homes, the NI government's fuel poverty strategy was published in 2011. It identifies four areas in a strategy to tackle fuel poverty:
 - Targeting of Resources
 - Improving Energy Efficiency
 - Achieving Affordable Energy
 - Building Strong Partnerships
- In 2011 a preliminary review, *Defining Fuel Poverty in Northern Ireland* produced a new type of fuel poverty indicator to identify severe fuel poverty. It is based on a household spending twice the NI median spend on fuel, rather than greater than 10% of disposable income spend.

Introduction

Fuel poverty is defined as a situation where someone is unable to afford to heat their home to a level that is healthy and safe. It is caused by the interaction of high fuel prices, low income and poor energy efficiency in the home. An important aspect of fuel poverty is that people may go without other essentials in their lives in order to keep warm in their homes. Older people experience a dual burden when it comes to fuel poverty. They are both more likely to experience fuel poverty than other age groups, and are particularly vulnerable to health and social harm as a result of this experience.

Fuel poverty has been very much on the political agenda in both Northern Ireland (NI) and Republic of Ireland (ROI) in recent months. In ROI, the issue has been debated at cabinet meetings and a new fuel poverty strategy is promised before the end of 2011. In NI, three recent pieces of research shed more light on fuel poverty, published by the NI Assembly research team (NI Assembly Research Team, 2011), the Citizens Advice Bureau (CAB) and the Department of Social Development (Liddell et al., 2011).

CARDI funded an all-island study in December 2009 which further builds on existing knowledge on fuel poverty but with a particular focus on older people. It involved an analysis of existing data and research on fuel poverty, a survey with older people on fuel poverty issues in ROI and an examination of mortality patterns in NI and ROI. It also identifies the groups among the older population who are most at risk of fuel poverty and the implications for their health and well-being.

This research brief is based on the findings from the final report of the project, *Fuel Poverty, Cold Weather & Older People: An All-island Analysis* (Goodman et al., 2011).

Key findings

- Cold temperatures are associated with increased mortality and the effects extend for 2-3 weeks after a cold snap. The older population is principally affected the most, with each 1°C decrease in temperature being associated with 2.6% increased total mortality (Goodman et al., 2004).
- Excess winter mortality is not normally recorded as being from hypothermia, but rather the cold weather increases the risk of deaths from existing cardiovascular disease, stroke and respiratory conditions (Goodman et al., 2011).
- The risk of fuel poverty is concentrated among older people living alone across the island of Ireland (Goodman, et al., 2011). 29% of all older people in ROI live alone and 32% of older people in NI (Central Statistics Office, 2007) (NISRA, 2002).
- Older people tend to live in houses which are not energy efficient, lack adequate insulation or lack central heating (Goodman et al., 2011).
- Older people are heavily reliant on benefits to keep above the poverty line: In NI, the relative income poverty rate for pensioners excluding state social transfers was 77%, compared to 88% in ROI (CARDI, 2010a).
- Older people in NI living in rural areas are more likely to lack central heating, have poor housing condition and experience fuel poverty, while there is little evidence of a rural – urban difference in fuel poverty in ROI (Goodman et al., 2011).
- Increasing fuel allowance will in itself not address the root of the problem which centres on energy inefficient homes, low incomes and rising fuel prices.

Older people in Ireland

At the time of the last census in 2006, there were 468,000 people aged 65 or over in ROI (11% of the total population). In NI, there were 249,000 people aged 65 or over according to the last census in 2001 (14% of the population) (CARDI, 2010). By 2041, it is predicted that there will be 1.4 million people aged 65+ in ROI and 493,000 in NI. This shows how quickly the population across the island is ageing.

29% of all older people in ROI live alone, compared to 32% of older people in NI. These older people living alone are a high risk group for fuel poverty due to economies of scale in the household budget. Older people living alone are also less likely to have central heating: 10% vs. 7% of other households with one person aged 65+ in NI, and 20% vs. 13% in ROI.

In ROI, 44% of people aged 65 or over live in rural areas (Central Statistics Office, 2007). In NI, men living alone make up 3% of households in rural areas while women living alone make up 9% of all households in rural areas (NISRA, 2009). The cost of living tends to be higher for older people in rural areas, which is further impacted by more people living on low incomes and often in energy inefficient housing or houses which are under-occupied.

The majority of older people in Ireland, North and South, live in their own home. In ROI, 90% of older people living in private households occupy homes that they own with or without a mortgage. 8% live in social housing and 2% live in privately rented accommodation. In NI, 70% of the homes of older people are owner occupied while 23% live in social housing and 7% live in privately rented accommodation. As a result of the high levels of owner occupancy, most responsibility for housing condition and the management and cost of the heating supply falls on older people themselves.

Fuel poverty prevalence

The most commonly understood measure of fuel poverty is derived from the proportion of disposable income spent on energy in the home, including light and heat. Projections based on data from the Household Budget Survey 2005 in ROI estimate that 19.4% of all households were fuel poor in 2008 (Scott et al., 2008). In NI, data from the National House Condition Survey in 2009 reveal an estimated 44% of households in fuel poverty (Northern Ireland Housing Executive, 2009). However, the figures are not comparable due to different methodologies used¹. The EU-SILC indicators, including whether a householder has gone without heating in the last year, used in ROI may under-represent the extent of fuel poverty, so should be interpreted with caution when it comes to developing fuel poverty policy (Goodman, et al., 2011). Fuel prices have also increased dramatically while state supports, such as the Christmas Bonus payment and Household Benefit Package in ROI, have been reduced or cut. This may have increased the levels of fuel poverty since the research in both NI and ROI was conducted.

¹ For full details, see Goodman, et al. (2011).

Using expenditure-based indicators, 22% of people aged 65 and over spent 10% or more of their disposable income on heat and light in ROI in 2005 (Central Statistics Office, 2006). According to EU-SILC figures, people at risk of poverty are particularly vulnerable, as 8% of this group reported that they cannot keep their home warm and 17% went without heating at some point in the previous year (Central Statistics Office, 2010a).

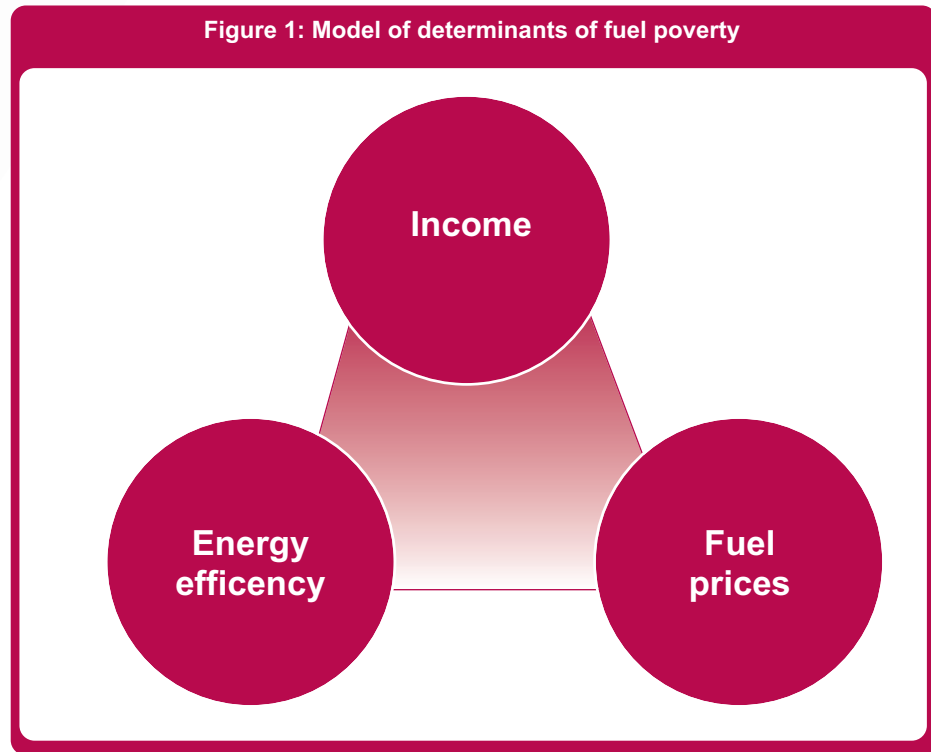
Although the figures are not directly comparable, 65% of people aged 65 and over in NI were recorded as being in fuel poverty, and 18% in severe fuel poverty (spending 20% or more of disposable income on heat and light) (Northern Ireland Housing Executive, 2009). In NI, 53% of households where the household reference person was aged 60-74 and 76% of households where the reference person was aged 75 or over were in fuel poverty in 2009. Of all households in fuel poverty in NI, 23% have a household reference person aged over 75 and 27% have a person aged 60-74. This indicates that nearly half of all fuel poor households in NI are those of older people (Northern Ireland Housing Executive, 2009).

The risk of fuel poverty is concentrated among older people living alone across the island of Ireland. In ROI, single person households where the person is over the age of 65 experience fuel poverty in 36% of cases (Central Statistics Office, 2006). In NI, the 2009 House Condition Survey reported a remarkable fuel poverty rate of 84% among older people living alone (Northern Ireland Housing Executive, 2009). The proportion of older people in fuel poverty also increases with age, with the over 75s experiencing higher levels than those aged 65-74.

Fuel poverty and healthy ageing

From a demographic perspective, the numbers of older people vulnerable to the ill-effects from cold homes will increase as part of the overall ageing population. Increasing life expectancy also means that there will be more people aged 80 and over and more people living with chronic illness or disability. These groups are more susceptible to the ill effects of living in fuel poverty. The vulnerability of older people to fuel poverty is driven by energy inefficient housing, low income and increasing fuel prices.

Figure 1: Model of determinants of fuel poverty



Energy efficiency

In ROI, almost half of all older people live in houses built before 1960. Older properties are generally harder to heat and are more likely to lack an efficient central heating system. The Irish National Survey of Household Quality in 2002 (Watson & Williams, 2003) found that people living in houses built before 1940 were twice as likely to report a major problem with heating as the general population. 8% reported major problems with leaks or dampness, compared to 1% when the property was built after 1990 (Watson & Williams, 2003). The majority of older people live in detached or semi-detached houses, which is a widely recognised risk factor for fuel poverty. Detached houses are often larger and can be harder to heat, lacking the insulation provided by an adjoining property.

While the data on energy efficiency measures are not directly comparable between NI and ROI, similar patterns can be observed. For example, older people are less likely than the general population to have attic/loft or wall insulation or double glazing.

Income and fuel poverty

In 2010 research undertaken by Professor Hillyard showed that pensioners in NI face a significant risk of poverty. The number of single pensioners at risk of poverty in NI has risen by 57% in the last six years, and pensioner couples by 26%. In ROI, the rate of pensioners at risk of poverty has fallen to 11% in 2008, but there have been recent cuts to the Household Benefits Package, including free allowance of electricity and gas units (CARDI, 2010a).

In NI, the relative income poverty rate for pensioners excluding state social transfers such as the state pension was 77% in 2008/09. Similarly in ROI, 88% of people aged 65 and over are at risk of poverty when social transfers are excluded. This shows that across the island of Ireland, there is very heavy reliance on social protection to keep people above the poverty line. As a result, cuts to benefits can have a severe impact on the older population and significantly increase the risk of falling into fuel poverty.

Low income households are at risk of fuel poverty as there may simply not be enough money to cover heating costs. However, evidence from England suggests that just one third of fuel poor householders were poor in terms of their income, and therefore fuel poverty is increasingly an issue for middle-income households (Palmer et al., 2008).

Increasing fuel prices

The price of fuel itself has a significant impact on whether or not older households can afford to heat their homes. In NI, the price of heating oil has risen by about two thirds between August 2009 and August 2011. In ROI during the same time period, the price of heating oil has risen by about 60% (see Goodman, et al., 2011). Prices of electricity and gas are also on the rise in both NI and ROI, despite the liberalisation of electricity generation and supply markets.

There is a high dependence on oil as a fuel for heating across the island of Ireland – 59% of those aged 65 and over in ROI and 74% in NI use oil for central heating. Oil supply is an unregulated industry, with the price being at the discretion of the supplier. This can place older people buying home heating oil in an uncertain financial position.

Who is most at risk of fuel poverty in the older population?

- Older people living alone
- Rural older population in NI
- Older people with chronic illness / disability
- Low income older groups
- Older people with no central heating / in poorly insulated homes

Impact of cold weather on the older population

As part of the CARDI-funded project, a survey² of 722 older people was undertaken in ROI. It sought to examine the impact that cold weather has on the behaviour of older people in the population (Goodman, et al., 2011). Fuel poverty and the quality of housing emerged as serious concerns in the findings. However, most older people were coping well with the cold snaps.

Almost a quarter (24%) of the sample described their home as too cold, while 62% were very worried or somewhat worried about the price of heating their home. Just over half of the sample (51%) responded that they went without necessities such as food and clothing in order to pay for heating over the winter period. Over half of the sample said that they save money in order to pay for their heating bill, but 10% felt that they could not afford to save for

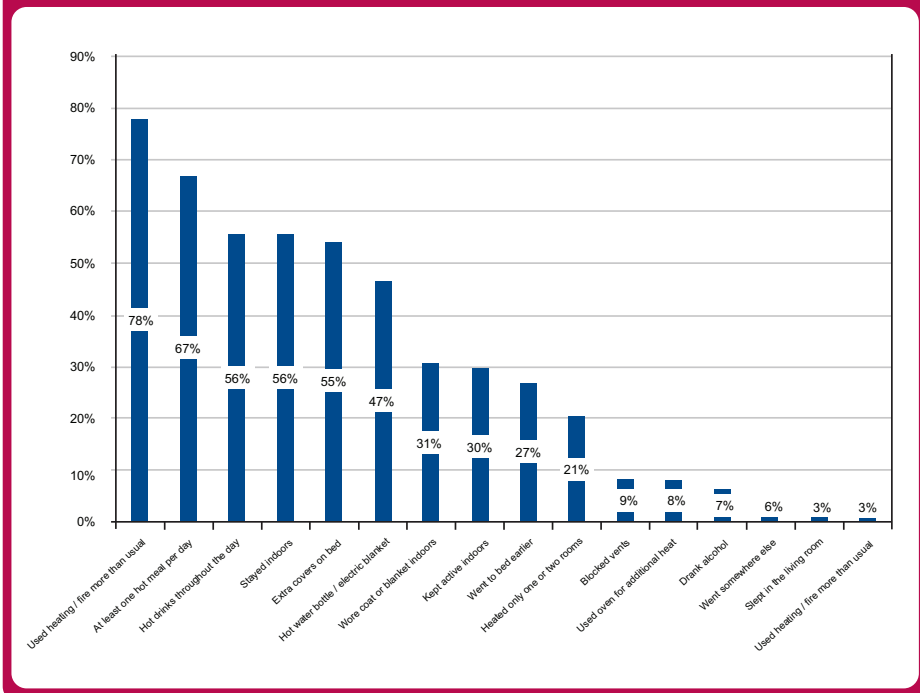
² The questionnaire was distributed using groups and services which interface with older people so the sample cannot be considered representative. Full results from the survey are available in the final report from the project.

this purpose. The results also show a strong preference for cash payments for fuel.

The quality of houses and heating are major difficulties. Draughts, dampness and moulds were common concerns. Storage heaters were frequently used even though they are considered an unsatisfactory way to heat a house by the people who use them. The survey found that 8% of respondents use the oven for additional heat during cold snaps.

In terms of the behaviour of older people during colder weather, most keep their heating switched on for longer periods, stay indoors as much as possible and consume hot meals and drinks. There are safety concerns raised by the finding that carbon monoxide monitors are not commonly reported to be present in respondents' homes, vents are blocked and older people do not organise chimney sweeping or boiler servicing often enough.

Figure 2: Response of the older population in ROI to cold weather



Source: Goodman et al., 2011

Fuel poverty and health

There are many factors which drive higher levels of deaths in the winter months. Living in a cold indoor environment, which is associated with the experience of fuel poverty, is one of these factors. There are some groups of older people who are most at risk of harm if they are living in fuel poverty or a cold environment. These include:

- Older people with chronic illness or disability.
- Older people with pre-existing heart disease, stroke or respiratory disease.
- Older people with mental health issues.
- Older people with a history of falls.
- Older people who have not received appropriate winter vaccinations.
- Older people in the very oldest age groups.
- Older people who are vulnerable to social exclusion.

It is worth noting that the prevalence of excess winter mortality is not related to the country's cold winter temperatures. In fact, one study across EU countries from 2003 (using data from the 1990s) showed that Portugal had the highest winter mortality even though it also had the highest mean winter temperature. This is outlined in Table 1 below, which also shows that Finland had the lowest winter mortality despite also having the lowest mean winter temperature, and this has been attributed to the high quality of insulated housing.

Table 1: Seasonal variation in mortality and mean winter temperatures

Country	Co-efficient of seasonal variation in mortality	Mean winter temperature (°C)
Portugal	0.28	13.5
Spain	0.21	6.5
ROI	0.21	5.8
UK	0.18	5.4
Greece	0.18	11.6
Italy	0.16	6.4
Austria	0.14	1.4
Belgium	0.13	3.7
France	0.13	7.0
Luxemburg	0.12	1.5
Denmark	0.12	2.1
Netherlands	0.11	4.3
Germany	0.11	1.6
Finland	0.10	-3.5

Source: Healy, 2003

It is clear that in many countries, there is significantly more mortality in winter than in summer. In some instances some of this excess winter mortality can be explained in terms of epidemics such as influenza. However, there are many studies which have taken account of influenza, and still demonstrate a strong relationship between increased mortality and cold temperatures (see Goodman et al., 2011).

A study of temperature-related mortality for Dublin in 2004 showed that cold temperatures were associated with increased all-cause mortality. The effects extended for 2-3 weeks after a cold snap as opposed to being just an immediate acute effect. The older population was affected the most, with each 1°C decrease in temperature being associated with 2.6% increased total mortality (Goodman et al., 2004). This excess winter mortality is not normally recorded as being from hypothermia, but rather the cold weather appears to trigger deaths from existing cardiovascular (CVD) or respiratory conditions (Goodman, et al., 2011).

Mortality rates have dropped over the past 20 years in both NI and ROI, even though the population is both increasing and ageing. At the same time, mortality data from across the island of Ireland shows that cold weather gives rise to increased mortality. There is excess winter mortality for cardiovascular conditions, respiratory conditions and stroke among the older population in NI and ROI (Goodman, et al., 2011). In NI, an estimate by Age Sector Platform states that 756 people aged 65 and over died from cold-related illnesses in 2009/10 (Age Sector Platform, 2011).

International best practice: Sweden

Studies show that countries with a relatively warm or mild winter climate, such as Spain, Portugal, Italy, the UK or ROI, experience much greater excess winter mortality than countries with harsh climatic conditions during winter, such as Finland, Sweden or Norway (Healy, 2003). There are lessons to be learned from the countries with colder climates on how to tackle fuel poverty.

Sweden has a well-established policy of energy efficiency in households. In the household sector, energy efficiency has improved by 29% since 1990 and 12% since 2000. There is a central agency, the Swedish Energy Agency (STEM), which is responsible for the implementation of energy policies set out by the government (Odysse-Mure, 2011).

There has been a successful retro-fitting programme for older buildings which introduced additional thermal insulation and upgraded windows to retain heat. Revised construction regulations for households were introduced in 2009 which ensure that all new build houses are energy efficient to a very high standard. Older people in colder climates also protect themselves better against the cold, taking measures such as wearing warmer clothes and keeping active. Communicating this information to older people is an important lesson for the milder countries with higher winter mortality (The Eurowinter Group, 1997).

Fuel poverty policy in ROI

The Programme for Government introduced following the general election in 2011 committed to a new fuel poverty strategy for ROI (Department of the Taoiseach, 2011). It is due to be published in the fourth quarter of 2011 and will include recommendations on the adoption of a government definition of energy poverty and a range of actions to be taken across departments including energy, social protection, environment, housing and health. However, before the strategy was published, the government announced that both the Fuel Allowance and the Household Benefit Package will be cut in order to make savings of EUR 65 million. However, fuel poverty itself has a very high cost to health and care services, which is likely to negate any savings made (NEA Cymru, 2011).

The main government energy poverty policy has an important role to play in setting out the direction of the key departmental and agency actions which directly address fuel poverty. These key actions will certainly relate to social protection benefits and allowances, utility regulation and schemes to improve energy efficiency of housing in the owner-occupier, social housing and rental sectors.

However, there are many policies which may have an important supporting role to play in preventing the situation where an older person lives in a home that they cannot afford to heat to a level that is healthy and safe. These include policies relating to pension provision, family carers, the support of community groups and the prevention and management of chronic illness. For example, it would certainly seem that the adoption of policies relating to vaccination for influenza and streptococcal disease would contribute to preventing illness and death for older people living in cold housing.

Fuel poverty policy in NI

Warmer Healthier Homes, the NI government's fuel poverty strategy was published in 2011. It makes directing resources toward the most vulnerable members of society a priority. The strategy identifies four key areas for action to tackle fuel poverty in the future:

- Targeting of Resources
- Improving Energy Efficiency
- Achieving Affordable Energy
- Building Strong Partnerships

The particular situation of fuel-poor older people features strongly in the strategy. Measures which aim to benefit the older population in NI include encouraging more uptake of benefits, an oil stamp savings scheme and a focus on the disabled population (Department for Social Development, 2011). There are also specific schemes aimed at moving households from solid fuel to oil heating.

The recently published Preliminary Review *Defining Fuel Poverty in Northern Ireland* produced a new type of fuel poverty indicator. It is based on a household spending which is twice the NI median spend on fuel *i.e.* a threshold of 18%, rather than 10%. The authors propose that this is a supplementary indicator and not a replacement for the existing 10% based indicator (Lidell et al., 2011).

The issue of fuel poverty was debated in the NI Assembly on 19 September 2011. A motion was put forward calling on the Minister for Social Development to make representations to the Westminster government to maintain the winter fuel payment the current level is £250 for pensioner households where someone is between 60 and 79 years of age, and £400 where someone is over 80 years of age (NI Assembly, 2011). However, the Westminster government has decided to cut the winter fuel payment for people aged between 60 and 80 by £50 and cut the payment for people aged over 80 by £100 (Age Sector Platform, 2011).

Policy implications

The issue of fuel poverty among older people is complicated, with many aspects to consider. Giving people more money to heat their homes is not the answer, but rather a multi-faceted approach must be taken. The broad policy focus should be on home improvement and energy efficiency schemes working in parallel with fuel allowance schemes and addressing the fundamental problems associated with income levels.

Targeting vulnerable groups

Older people living alone must be a specific focus in policy responses to fuel poverty. In particular, any review of income supports needs to take into account the particular vulnerability of this group. People who are over 80 and older people with a disability have also been identified by the Goodman et al. (2011) research as having high vulnerability to fuel poverty. Cold homes are a particular threat to the health of older people, especially those with chronic conditions.

With the governments in both NI and ROI introducing significant cuts to household benefits, including fuel allowances, a simple policy measure would be to have exemptions from these cuts for the most vulnerable groups of older people. Many older people rely heavily on state supports to keep them out of income poverty. Thus, any cuts to state pensions or other benefits are likely to have a knock-on effect on fuel poverty. It is important that decisions to cut benefits take this into account, especially if the alternative is for the older person to move from a cold home to expensive residential care.

Developing energy efficiency

Older people are spending a lot of money on heating highly energy inefficient older dwellings. As a result, home improvement schemes are just as important as fuel allowance and other benefit schemes. Older people may not be in a position to pay for improvement works so government schemes are vital. Despite their importance, schemes such as the Group Repair Scheme offered by the Housing Executive in NI are currently on hold due to lack of funding. The adoption of a minimum acceptable energy efficiency standard could be applied across all housing sectors. There are wider benefits to these schemes as tackling fuel poverty will contribute significantly to improving the energy efficiency of the domestic housing sector at national level, and meeting climate change targets.

Improving the housing condition of older people's homes to a level comparable with the rest of the population could form a short-term priority action. Given the high percentage of older people living in homes with no central heating, policies aimed at ensuring that older people are at least as likely as the general population to have central heating could be considered. The Department of Social Development in NI operates a central heating scheme for low income groups, but a low level of take-up by the target group remains a key issue.

Communicating with older people

There are two ways in which communication about fuel poverty aimed at older people can support policy efforts. The first is in ensuring older people are in full receipt of their entitlements. One estimate by Access 2 Benefits suggested that £62 million pension credit alone go unclaimed in NI each year (Access 2 Benefits, 2010). Government agencies can work to highlight this issue and automatic payment of entitlements would ensure that older people are in full receipt of their state benefits.

The second communication issue is in highlighting the dangers of fuel poverty itself and what people can do to combat the effect. Information on cold weather snaps and the dangers of not heating homes properly must be passed to the older population. Mobile phones can be useful in highlighting this information given the high levels of usage. Full explanations of heating costs and how to get the most out of energy sources should be a priority for service providers. Efforts to engage fully with the older population are vital as it can be difficult to change old habits. Other steps such as encouraging indoor exercise during cold weather can bring benefits such as improving circulation and reducing falls³.

3 Age NI introduced a "Spread the Warmth" campaign to prevent older people from suffering from fuel poverty in NI.

Conclusion

Reducing fuel poverty in the population is an important component of healthy and positive ageing. Heating the home easily and without undue hardship can facilitate people to stay healthy, preserve their independence and stay living in their own home as they get older. It is also important in tackling social inequalities, as the poorest groups in society are the ones most affected by fuel poverty.

Helping older people to heat their homes easily and affordably is a crucial aspect of policy on older people across the island of Ireland. It is imperative that initiatives are introduced to reduce fuel poverty, particularly among vulnerable groups such as older people living alone, and to upgrade the energy efficiency of all housing stock. Providing affordable energy and good quality housing is made particularly important by the ageing of the population.

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Full report

The full research report is available at www.cardi.ie

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