Are New Zealand Tenants Still Fuel Poor?
A study on the awareness and effects of fuel poverty in low-income households

DR EZIAKU ONYEIZU RASHEED, MR LUKE HOLLIDAY, MR NITESH MOHANTY,
MASSEY UNIVERSITY
In 2015, Statistics New Zealand found a significant relationship between colder dwellings and tenant occupiers (Figure 1).

In 2006, only 9% of a documented 386 dwellings in New Zealand met the WHO standard for indoor temperature and in 2015, about 4500 people believed that their houses were too cold.
Background

- Household Energy End-use Project (HEEP) which was established in 1995, to monitor energy use and indoor environmental quality in NZ houses for ten years.
- The New Zealand Standard for installing insulation (NZS 4246:2016) was established to guide the correct installation of insulation products to achieve the intended thermal performance in residential houses.
- Insulation statements are now required, effective from July 2019, on all tenancy contracts, wherein the landlord must disclose whether there is insulation in the rental home, where it is, what type and what condition it is in so that tenants can make an informed decision.
- The Warm Up New Zealand: Healthy Homes” which offers 55% insulation subsidies for low-income homeowners and landlords with low-income tenants in homes built before 2000.
Lloyd (2006) pointed out that the New Zealand government has not done enough to provide those affected by fuel poverty with information, specifically on the relevant health issues.

The public may still be naïve to the dangers associated with being fuel poor.
This study aimed to ascertain whether New Zealand tenants are still fuel poor. To achieve this, two objectives were set:

- (a) to investigate the level of awareness of tenants to fuel poverty and
- (b) to ascertain whether fuel poverty is evident in the households of low-income tenants.
A two-stage survey was carried out on tenants in low-income households within Auckland city.

- Firstly, an online survey targeting tenants across Auckland city was undertaken to establish the awareness of tenants on fuel poverty and its effects.

- Secondly, a field survey was carried out on 50 rented households using a paper-based questionnaire and pictorial observation of the evidence of fuel poverty.
1. Online Survey

The selection criteria were:

- the living status of the participant (tenant or house owner),
- annual income and age of participants.

It was important that the participants are current tenants with an annual household income of below $49,999 and aged above 18 years (adults).

Table 1: background information on online survey participants

<table>
<thead>
<tr>
<th>Participants background information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Females - 66%</td>
<td>Male – 34%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>18 – 24 years – 60%</td>
<td>25 years and above – 40%</td>
</tr>
</tbody>
</table>
1. Findings

Participant awareness of the concept of fuel poverty

<table>
<thead>
<tr>
<th>Very Familiar</th>
<th>Sort Of Familiar</th>
<th>Not Very Familiar</th>
<th>Not At All Familiar</th>
</tr>
</thead>
<tbody>
<tr>
<td>47.6%</td>
<td>23.81%</td>
<td>16.67%</td>
<td>4.76%</td>
</tr>
</tbody>
</table>

Source of Familiarity with Concept of Fuel Poverty

<table>
<thead>
<tr>
<th>Printed Material</th>
<th>Internet</th>
<th>Television</th>
<th>Word of Mouth</th>
<th>Not Familiar</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.63%</td>
<td>10.53%</td>
<td>7.59%</td>
<td>7.59%</td>
<td>10.53%</td>
</tr>
</tbody>
</table>

Do you believe your household is affected by fuel poverty?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>73.17%</td>
<td>26.83%</td>
</tr>
</tbody>
</table>

To what extent do you believe your household is affected by fuel poverty?

<table>
<thead>
<tr>
<th>Not Affected</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Greatly Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.98%</td>
<td>0%</td>
<td>10.26%</td>
<td>7.69%</td>
<td>10.26%</td>
<td>7.69%</td>
<td>20.31%</td>
<td>10.26%</td>
<td>10.26%</td>
<td>15.98%</td>
</tr>
</tbody>
</table>
1. Findings

Familiarity with Health Issues pertaining from Fuel Poverty

- Very Familiar: 10.81%
- Sort of Familiar: 43.95%
- Not Very Familiar: 32.43%
- Not at all Familiar: 10.81%

Nature of Health Effects

- Physical: 94.7%
- Psychological: 42.11%
- Social: 31.58%

Have you ever sought advise on how to reduce the effects of fuel poverty in your household?

- Yes: 20.59%
- No, please explain why: 77.41%
1. Findings

Where have you received information on how to reduce the effects of fuel poverty in your household?

- Newspapers/Magazines: 8.82%
- Internet: 14.71%
- Television: 2.94%
- Friends/Family/Word of Mouth: 5.98%
- I have not received any: 67.65%

Have you ever acted on this information?

- Yes: 82.35%
- No: 17.65%

Do you believe enough information on how to reduce the effects of fuel poverty is being provided?

- Yes: 94.12%
- No: 5.88%
2. Field Survey

To establish the existence of fuel poverty and its effects, a household is expected to have
• poor thermal performance, and
• experience associated health symptoms and
• financial constraints to keeping the home warm when required

The occupants of rented apartments

Table 3: Background Information on participants

<table>
<thead>
<tr>
<th>Participants background information</th>
<th>More than one year</th>
<th>Less than one year (24%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residence tenure</td>
<td>(76%)</td>
<td></td>
</tr>
<tr>
<td>Occupants per household</td>
<td>2 and 3 occupants</td>
<td>4 or more occupants</td>
</tr>
<tr>
<td></td>
<td>(38%)</td>
<td>(62%)</td>
</tr>
</tbody>
</table>
2. Findings

Evidence of poor thermal performance

<table>
<thead>
<tr>
<th>Condition</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>No Idea</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condensation</td>
<td>15%</td>
<td>35%</td>
<td>22%</td>
<td>17%</td>
<td>9%</td>
</tr>
<tr>
<td>Roof Leakage</td>
<td>19%</td>
<td>17%</td>
<td>4%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Damp walls/floors</td>
<td>17%</td>
<td>19%</td>
<td>4%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Mold growth</td>
<td>8%</td>
<td>4%</td>
<td>9%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Health symptoms of fuel poverty

- Coughing: 22%
- Running nose: 17%
- Bronchitis: 17%
- Shortness of breath: 6%
- Sneezing: 6%
- Sore throat: 4%
- Blocked nose: 4%
- Chest tightness: 3%
- Sinus swelling: 15%
- Chest tightness: 17%
2. Findings

**In the past 12 months, have you put up with feeling cold to save on heating expenses?**

- Yes: 58%
- No: 42%

**How often is it difficult to afford the fuel expenses in their homes?**

- Never: 30%
- Occasionally: 24%
- Quite often: 12%
- Frequently: 34%

**What level of financial stress experienced by the participants after paying their energy bills?**

- None: 16%
- Slightly: 14%
- Somewhat: 28%
- Moderate: 35%
- High: 6%
Further studies

- More study in other cities across the country
- Sensitisation project for occupants of rental properties

Thank you
Questions?