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Uncovering the impacts of housing policies on health equity with multiple methods

Davide Malmusi for the SOPHIE housing policies team

"How to tackle health inequalities?" Preconference #EPHGlasgow 20 November 2014



SOPHIE Housing policies team



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Why housing? (1)



Secular trends in improvement of housing conditions have been regarded as a major factor behind advances in population health.

Housing as "wobbly pillar" of the welfare state (and social epi?).

Evidence of positive health impact of interventions improving physical housing conditions. Less evidence on:

- Health equity impacts
- Policies influencing access to housing and housing cost



Why housing? (2)



Literature mainly from UK, New Zealand... much less in Spain where it has been an increasingly pressing social issue, both before and after the burst of the housing bubble





What are we doing?



European overview

1. Literature reviews and conceptual framework on housing policies, housing conditions and health inequalities

2. European housing systems and health-related housing outcomes: ecological and multilevel analyses

Focus on fuel poverty

- 1. Realist synthesis on energy retrofitting and health equity
- 2. Natural experiment on thermal insulation and winter mortality in social housing
- 3. Resistance to austerity on UK fuel poverty policies

Focus on people with severe problems of access to housing

- 1. Caritas BCN users: survey, rehousing quasi-experiment
- 2. "Mortgage affected platform": online survey, cohort?







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Conceptual framework





Adapted from Ana Novoa et al. Impact of the crisis on the relationship between housing and health. Policies for good practice to reduce inequalities in health related to housing conditions. Gac Sanit. 2014 Jun;28 Suppl 1:44-50.



Literature review



Large body of literature showing the link between inadequate material housing conditions and poor physical and mental health and mortality. Health benefits of *thermal comfort improvement*.

Adverse impact on health of **insecure housing** and **lack of housing affordability**. Evidence of benefits of *social housing* and *rent subsidies* on health determinants.

Homelessness strongly associated with multiple physical and mental health problems and lower life expectancy. Positive impacts of both *"housing first"* and *"staircase"*.

Jordi Bosch. Literature review of the relationship between housing systems and health inequalities. Unpublished









Housing systems and health inequalities



Gap in knowledge on the link between housing systems and health.

We have constructed **country indices** of health-related material and economic housing problems. They are ecologically linked to economic development, welfare regimes and "housing bubble"

Now starting a **multilevel analysis** of the association of country housing systems with the prevalence, social distribution and health impact of these housing problems in the European population



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Focus on fuel poverty



Realist synthesis: energy retrofitting and health equity

To explain how and why public policies influence social inequalities in receiving housing energy retrofitting and in its health impacts

Key reviews/reports, stakeholders interviews, systematic search of articles (124 read, 70 used)







Focus on fuel poverty



Realist synthesis: energy retrofitting and health equity *Main conclusions:*

Social categories suffering most from fuel poverty (low-income, renters, elderly) can attain <u>more health benefits</u> from housing retrofitting but experience <u>more barriers</u> (upfront costs and presentism, split incentives, disruption and lack of control)

Public policies on housing energy efficiency usually exacerbate these inequalities, unless they are specifically aimed at tackling fuel poverty or social inequities, totally free to users, targeted at most affected groups and adapted to their needs





Focus on fuel poverty

Natural experiment: Social housing insulation and winter mortality



Objective: Evaluate the impact of energy efficiency facade retrofitting interventions on the association between cold outdoor temperatures and mortality in public housing buildings in the city of Barcelona from 1985 to 2013

Methods: Case-crossover design. Buildings geocoded with Regional Housing Agency intervention dates and linked to census and mortality data Results: Spring 2015



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Survey interview on socioeconomic and housing conditions, health of the respondent and of one of her/his children





Health status of people with severe problems of access to housing

n=175

Families living in substandard housing

... or with difficulties paying rent or mortgage (Housing Mediation Service)

> n=145 Baseline survey (Sept-Dec 2012)



Focus on Caritas users



Health status of people with severe problems of access to housing

Much worse health status than Barcelona population (overall and manual social classes)





Focus on Caritas users



Health status of people with severe problems of access to housing

Much worse health status than Barcelona population also for children











Rehousing quasi-experiment

The fieldwork





Focus on Caritas users



Rehousing quasi-experiment: preliminary results

Rehoused adults report more improvements in housing conditions, and similar improvements in health as "controls" (some of whom also move, find job, increase income)

Improvements in habitability, tenure security and income significantly associated with improvements in health (especially mental health)





Dissemination and stakeholders contact



Nueva encuesta de la PAH: las dificultades relacionadas con la vivienda en la infancia y la salud

LA PAH HA PARALIZADO 1135

DESAHUCIOS

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