

Linking research and practice: using research findings to maximise the potential for housing improvements to improve health

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Evidence for Healthy Public Policy

- Interest in evidence for policy making
- Health Impact Assessment (HIA)
 - ‘any combination of procedures or methods by which a proposed policy or programme may be judged as to the effects it may have on the health of a population’
Ratner et al 1996
- Draws on range of knowledge
 - local and lay knowledge
 - existing research findings

Existing research findings

- Systematic review process
 - Locating
 - Appraising
 - Synthesising
- Provides transparent, comprehensive review to answer specific question
- Outwith scope of practitioner & policy maker skills and resources

Can improved housing improve health?

- Included

Housing intervention studies which measured health and/or social effects- ALL designs

outcome measures incorporate a broad model of health
pre & post intervention survey of self-reported health
systematic reviews

- Excluded

Radon, lead, furniture interventions, home fire and accident prevention, relocation, housing subsidies

Review of world literature

- Searched all relevant databases (16)- all languages
- Hand searching bibliographies
- Contacted experts- UK and international, e-mail housing groups
- Included ALL studies which tracked health, illness or wellbeing changes following rehousing or housing improvement
- Identified 13,444 papers on housing and health

Systematic review of housing improvements

- Very few studies 18 studies
- Findings of health impacts:
general improvement, especially mental health
possibility of adverse effects
- General lack of evidence and uncertainty due to conflicting findings

Overview of findings from best studies

- **Objective measure of mental health** **Improved**
(1 study of Medical Priority Rehousing n=22)
- **Self-reported health & illness episodes** **Improved**
(2 studies of rehousing, n<1000 &159)
- **Self-reported symptoms** **Inconsistent**
(2 studies of energy efficiency, n=132 & 641)
- **Age standardised mortality rates** **Increased**
(1 study of rehousing, n= 2008)

Rehousing/refurbishment with or without community regeneration

12 studies (7 UK, 4 USA, 1 Japan)

Assessed

- range from new bed to new housing and relocation from slum area
- Outcomes: self-reported health and wellbeing, symptoms, respiratory health, mental health measures, death rates, social involvement, fear of crime

The digested review:

Rehousing/refurbishment with or without community regeneration

- Feelings of general health or wellbeing Inconclusive
- General Illness Inconclusive
- Breathing problems Inconclusive
- Mental health Improved
- Death rates Worse

Energy efficiency studies

4 studies (3 UK, 1 Denmark, 1986-1999)

Assessed

- Central heating
- Installation of heat with rent
- Replacement windows
- General energy efficiency measures in tower blocks

impact on

- childhood respiratory symptoms
- general symptoms
- general symptoms
- general health

- studies of refurbishment and rehousing did not specify energy efficiency improvements

The digested review: *Energy efficiency*

- Feelings of general health or wellbeing Improved
- General Illness Inconclusive
- Breathing problems Improved
- Mental health Inconclusive
- Other: school time lost due to asthma Improved

Medical Priority Rehousing

- 3 studies (all UK)
- Outcomes: mental health (Foulds) and self-reported mental and physical health

The digested review: Medical Priority Rehousing

- Feelings of general Health or wellbeing Improved
- General Illness Inconclusive
- Mental Health Improved

Broader research evidence base

- Lack of clear findings of little use to practitioners
- Need broader research evidence base: to include knowledge of observed links between housing and health
- Drew on systematic and expert reviews where available

Physical characteristics of housing associated with poor health

Most serious hazards ranked

Air quality (particles & fibres causing death among the very ill)

Hygrothermal conditions (warmth & humidity)

Radon

Slips, trips and falls

Noise

House dust mites

Environmental tobacco smoke

Fires

Building Research Establishment review (2001)

Other housing related links to health

- Warmth & seasonal variation in mortality rates
- Housing tenure
- Housing design
- Housing satisfaction

Associated with housing improvement programmes

- Changes in rent increases and housing costs
- Process of moving house
- Social context and area effects of general area improvements
- Relocation to another area: neighbourhood effects
- Displacement
- Social exclusion and community division
- Gentrification

Sources of Research Evidence

- Systematic review of health impacts of housing improvement
- Observational research reporting main housing hazards linked to health
- Factors often associated with housing improvement programmes and reported to have health impacts or to explain presence or absence of impacts

Research informed questions

- Details of changes

Are there going to be any changes to housing costs?

- Implementation of housing improvement

Was there sufficient consultation about the housing improvements?

- Linking changes to health impacts

What is the research evidence that these changes will affect health and any specific symptoms?

Thomson H, Petticrew M & Douglas M. (2003) Journal of Epidemiol & Community Health

Guide for assessing health impacts of housing improvements

- Feeds evidence into practice
- Responding to practitioner requirements
- Update to include identified ongoing studies ?2004

Guide for assessing health impacts of housing improvements

- HIA process: screening and scoping project, identifying and assessing potential health impacts, making recommendations
- Sources of further information and data on housing
- Overview of housing in Scotland- tenure, standards, type, occupancy rates (Scottish House Condition Survey 1996)
- Tolerable Standard for housing
- Overview of new Scottish Housing Act

Bridging the research policy gap

- Central resource: policy, research, HIA guidance, relevant information resources
- No concrete answers- but points in the direction of important areas to address prospectively
- Highlight areas of uncertainty for HIA

Full report available soon

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