



Abstracts

W03- The Residential Context of Health

Last update: 13 june 2007



www.enhr2007rotterdam.nl

General reform: The health implications of housing change

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Housing is the place we spend the majority of our lives and is well established as a key determinant of health, but the relationship between housing and health is complex and poorly understood. Both health and housing are definitionally 'fuzzy' concepts, and though there is a well established relationship between them, the details are unclear, and the evidence is best described as piecemeal. In sum however, this fragmented evidence shows housing to be a significant influence on health. Regardless of the complexity of the relationship, it is clear that good housing and good health go together. Residential mobility and relocation research provides a promising approach to improving understanding of the health-housing relationship. Being able to examine the health and wellbeing of households in two residential settings is a potentially valuable means of disentangling the complex set of processes that shape the relationship between housing and health. Residential mobility thus provides a valuable, but under-researched, entry-point to improving knowledge of the relationship between health and housing. This paper explores a mobility approach to understanding the health-housing relationship.

Estimating the costs to society of poor housing

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There is a large and growing body of evidence linking adverse health effects with poor housing conditions. In 2004, the Government introduced a new statutory standard for housing in England, the Housing Health and Safety Rating System (HHSRS). This produces scores for dwellings based on the statistical risk of 29 hazards leading to harm to the occupants. Using the English House Condition Survey (EHCS) we can quantify the number of homes that represent significant hazards to the health and safety of their occupants and the costs of building work to rectify these problems. This paper describes how we are aiming to go beyond this and to estimate the total costs to society of poor housing conditions so that we can demonstrate that improving housing conditions makes both economic and social sense. Ultimately, we will produce a tool to enable policy makers to explore the impact of targeting improvements at different groups of properties or different groups of people.

This paper summarises previous research and presents our initial estimates of the number and profile of homes with significant hazards. It describes the methods used to estimate the typical total costs to society for the nine most common and reliably measured hazards within the HHSRS. This include the direct costs of medical treatment and care together with indirect costs, both to the individual affected and their immediate family as well as costs to wider society such as lost tax revenue/increased benefit spending, lost talent/productivity and higher costs of other services. Finally, it describes how we will use the HHSRS and its statistical base to estimate how far the number of adverse outcomes in any one year can be reduced by different levels of improvement carried out to homes and the cost benefits of such an approach.

Housing standards and health, welfare, policy and planning

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The use of housing standards in housing policy and planning has been criticized: Housing standards are given exaggerated importance to health and welfare. In policy and planning the use of housing standards are said to prohibit sensible and creative solutions, and represent a prehistoric way of thinking.

In this paper we are going through those objections in the Norwegian context. To what extent are housing standards still used in policy and planning? What are the historic and actual foundations for the standards still in use? The uses of housing standards are discussed in relation to local democracy, individual freedom of choice and professional competence and judgments.

Housing policy in Norway is for the last 20 years or so concentrated on selective means in a deregulated housing market. Only 4 percent of the total housing stock are owned by the local authorities.

The paper is based on a study about the role for the state, and the State Housing Bank, in a deregulated housing market.

(The Norwegian State Housing Bank serve as the government's main housing policy instrument, more explained in the paper.)

An integrated methodology for establishing the health-related cost benefits of housing adaptations and other housing interventions for older people

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In order for mainstream housing to be sustainable as the occupants get older, various adaptations and housing support services may be necessary. In the UK, State funding for these housing interventions is woefully inadequate, despite the likelihood that investment in such interventions may produce significant savings in health care costs such as some of the €1024 million (£700 million) currently spent annually on hip fractures in the UK.

In the argument for resources, a constant problem is lack of evidence of the benefits of these housing interventions that carries weight within the disciplines of medicine and economics. An international English-language literature review carried out for the English Department of Work and Pensions has shown the paucity of the evidence, and has reinforced the methodological problems.

It is to tackle this issue that a group of researchers have received funding from the English joint research councils as part of the New Dynamics of Ageing programme for a multi-disciplinary preparatory network to devise a methodology that will be respected across disciplines. The purpose of the methodology will be to demonstrate the cost benefits of housing interventions in terms of health and the prevention of ill-health.

The paper to be presented at the conference will be made on behalf of the group of researchers and will be 'work-in-progress': a summary of the literature review in regard to methodology and an outline of the proposed methodology as agreed by the group at that point. The critical and constructive comments of other researchers, including those aware of work published in other languages, will be very much appreciated.

Mortality in urban neighbourhoods in the Netherlands: Small differences between some subgroups of the population

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Background: Urban residents have higher mortality risks than rural residents. These urban-rural differences might be more pronounced within certain demographic subpopulations.

Aim: To compare urban and rural all-cause and cause-specific mortality risks and to estimate whether urban mortality risks differ between demographic subpopulations.

Method: Mortality records with information on gender, age, marital status, region of origin, and place of residence were available for 1995 through 2000. Neighbourhood data on address density and socio-economic level were linked through postcode information. Variations in all-cause and cause-specific mortality between urban and rural neighbourhoods were estimated through Poisson regression.

Result: After adjustments for population composition, urban neighbourhoods have higher all-cause mortality risks than rural neighbourhoods (RR=1.05; CI:1.04-1.05), but this pattern reverses after adjustment for neighbourhood socio-economic level (RR=0.98; CI:0.97-0.99). The beneficial effect of living in an urban environment applies particularly to individuals aged 10 to 40 years and 80 years and above, people who never married, and residents from non-western backgrounds. Non-married urban residents experience lower mortality risks for cardiovascular diseases and traffic accidents. Among urban residents from a non-western background, mortality risks are low especially for breast cancer, suicide and traffic accidents.

Conclusion: Living in an urban environment is not consistently related to higher mortality risks. In the Netherlands, especially young adults, elderly, single and non-western residents benefit from living in an urban environment. The urban environment seems to offer them better opportunities for a healthy life, such as jobs, affordable housing, nearby health services, or social contacts.

The relationship between community social capital and mortality across neighbourhoods in the Netherlands

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Background: The higher the stocks of social capital, the higher the health achievement of a given area appears to be. The relationship between social capital and health is however complex.

Aim: to determine the association between community social capital and all-cause and cause-specific mortality and to study this relationship among demographic subpopulations of the Dutch population living in rural and urban areas.

Method: Mortality records and individual data on gender, age, marital status, country of origin, and place of residence were available for the years 1995 through 2000. Neighbourhood data, i.e. social capital, socio-economic level and urbanicity were linked through postcode information. Social capital was indicated by measures of community interaction, attachment, responsibility for and satisfaction with the neighbourhood environment. Variations in all-cause and cause-specific mortality across low and high social capital neighbourhoods were estimated through Poisson regression. Additionally analyses were stratified according to demographic subpopulation and urbanicity.

Results: Social capital has no effect on all-cause mortality (RR=1.00; CI:0.99-1.01) but slightly lower mortality risks were seen among men, married, and individuals from western backgrounds living in high social capital neighbourhoods. Lower mortality risks for cancer and external causes but higher risks for heart disease were found in high compared to low social capital neighbourhoods. In the big urban cities, high social capital neighbourhoods have lower mortality risks (RR=0.95; CI:0.91-0.99). The relationship between social capital and mortality was reversed for the smaller urban cities (RR=1.04; CI:1.01-1.07) and insignificant for the rest of the Netherlands. Especially low mortality risks for external causes were observed in high social capital neighbourhoods located in the big urban cities with large positive effects among men, unmarried and individuals from a non-western background.

Conclusion: This study shows that the relationship between social capital and health is complex and varies according to demographic subpopulation, health outcome and urbanicity.

Making everyday choices in the context of ageing in place

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In Sweden and many other countries the amount of older people with functional limitations living in their own home are increasing as a consequence of the policies of 'ageing in place' and a demographic change towards an ageing population. Considering the global urbanisation, this group will to an increasing extent be found in urban areas. Consequently health and social care services to support ageing in place are crucial for sustainable urban areas. People ageing in place often experience environmental barriers in their home which has to be handled in order to manage daily life activities. In Sweden home modification services are provided to make it possible for persons with functional limitations to live independently in their home. To the older person the home is an experienced domain of place into which the environmental intervention must be integrated. The aim of this study was to explore the process of place integration mediated by home modification services in four older persons living in their homes. Four older adults who had applied for home modification services were included. Data was collected with open ended interviews and observations in the participants home environment at repeated occasions from before the modification had been installed until the process relating to the home modification was identified as ended. Preliminary findings show that the participants experienced a problematic situation as their problems in activity performance reduced their possibilities to make everyday choices. While waiting for the home modifications participants took action to regain this possibility to the largest possible extent by developing strategies to perform activities in spite of environmental barriers. Installed modifications that could be used in accordance with the participants values was shown to support their possibilities to execute everyday choices.

Case study on the bedrooms' environment of nursing home for the elderly in Korea **Dae-Nyun Kim**¹ // dnyun@seowon.ac.kr, **Young-Sun Yoon**², **Jae-Ho Moon**³, **Hea-Ryung Byun**⁴, **Miryum Chung**⁵, **Minjung Hong**⁶

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The purpose of this study is to analyze the bedrooms' environment characteristics of nursing homes for the elderly in Korea so that the current condition and problems can be found. Field case research was performed using structured checklist, measurement from Oct. 28th to Dec. 2nd, 2006. Collected data has been analyzed in the view of safety, privacy, amenity, and functional supportiveness.

For selecting the case, among the total of 542 nursing homes for the elderly nationwide (by Ministry of health and welfare's report in 2006), we choose 43 facilities which were located in Seoul and 6 megalopolis area and answered to our questionnaire in 2006. Then we narrowed down the list to 14 cases which were cooperative and made the case number even in terms of regional population.

The contents of investigation are consisted of 8 categories, that is, general characteristics of the bedrooms (including number of residents per room, using bed or floor mat, the size and shape of the chamber, space for wheelchair turning, and location, shape and height of signage), door of bedroom (including size/type of the door, shape and height of doorknob, the

existence and height of door sill/level difference, the existence of peeking window), windows in the bedroom (including type of window, the shape of window grip, window sill height, window treatment, window safety device/shape, view/daylight), furniture (including the existence of personal furniture, the existence of personalizing signage and lock), finishes (material, character and color of wall, floor, ceiling), lighting (including types of lighting, existence of night lighting, and type, location, number, height of switch), bathroom in the bedroom (including signage, size of the bathroom, door size/type, doorknob shape, height of the washbowl, size of toilet bowl, shape of mirror, handrail, finishes), and Other facilities (including location, height, cover for safety of outlet, and handrails).

Well-being, the decision making process in residential care facilities and accommodation in Denmark

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This paper discusses the results from one of the sub-research projects, called 'The Decision making process ' Process, Architecture, Well-being' a project in the main project 'Well-being and Housing project' and is based on a case study which consist of four cases, realized and planned projects for assisted living residential care facilities and accommodation for senior citizens selected from different parts of Denmark. The case study will provide important knowledge on municipal activities in the area of residential care facilities, as well as discuss the different actors' roles in the decision making process. The research is commissioned and financed by the Danish National Board of Social Services conducted by CAST University of Southern Denmark in collaboration with the Institute for Architecture & Design at Aalborg University in Denmark. Granted with 1.07 million €

Results:

1. More research-based knowledge is needed:
There is a need for research-based knowledge manuals among the actors involved in the planning and project design process which describe systematically the importance of working with the different aspects on Well-being in residential care facilities and accommodation in Denmark.
2. More time should be devoted to discuss the aspects connected to Well-being
During the planning and project design process more time should be given to more qualified discussions about what Well-being means to the residents and the employees and these discussions should be embedded in the decision making process.
3. Alternatives to 'the living environments'
In general a discussion about 'the living environments' as the only and right solution for organising the residential care facilities and accommodation in Denmark is recommended, thereby giving the possibility to create more private residential space and less floor space for public life in the residential care facilities and accommodations.

The HIV/AIDS challenges to sustainable housing management in Zambia for privatised housing in Kwacha Township - Kitwe

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When housing was privatised in Zambia in 1996, in partial fulfillment of the new housing policy of 1996, it was done against a backdrop of dwindling socio-economic factors and the advent of HIV/AIDS. Housing privatizing was done to relieve pressure on public coffers from sustaining the aging stock. At that time no rates were paid, electricity, water and garbage collection were subsidized. With privatisation, subsidies were removed and user fees introduced. HIV/AIDS has ravaged the Zambian society with an infection rate of 16 percent for adults, bringing a new dimension to sustainable housing management in the low income groups. Some homeowners

passed away leaving the management of these houses to their children or aged parents, most of who do not have capacity to cover running as well as house maintenance costs.

This paper looks at the challenges posed by HIV/AIDS to privatised housing owners who bought or inherited houses in Kwacha a non-mine township in Kitwe, Zambia's second largest city. It aims to answer two questions: How can sustainable housing management be achieved, in countries like Zambia, ravaged by HIV/AIDS when the lives of the people occupying these houses are proving difficult to sustain? And, how do HIV/AIDS challenged beneficiaries of the privatisation of public houses cope with the management of their houses, in the absence of other sources of income?

The paper focuses on the challenges young children and the aged, who themselves need financial, material and social care face in order to manage these houses in their everyday lives. It looks at what coping strategies they use in order to manage their houses and sustain themselves.

For successful aging in place in elderly housing: Factors influencing subjective well-being of the elderly housing residents of Denmark

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Elderly housings are the key accommodations for aging in place that provide physically supportive environment, such as no steps (barrier-free), wide toilet to help self-help and convenient surroundings to live independently for the elderly with a little physical frailty. In Denmark, they have stopped building new nursing homes since 1988 and have started building elderly housings where the residents can live independently as long as possible with getting community-based 24 hours care flexibly as they get more weak. This study presents results of research based on data from interviews with 15 residents in 3 elderly housings in Denmark and from quantitative survey with 62 elderly housing residents. The author found out through correlations and regression analysis that possibility of residential continuation and satisfaction of the housing and independent attitude of medical care and extroversion and action of getting out/meeting someone influenced most strongly on subjective well-being among other factors such as age, economic condition and health condition including behavioral competence. Results show distinctive profile of needs and resources concerning housing condition and flexible community-based care and social interaction and less dependence on medical care.

Increased annoyance from light output of greenhouses in areas not familiar with greenhouses

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Many greenhouses use artificial light to grow plants, causing visible sky glow. Initially, low density growth lights were used. With the introduction of high density grow lights, the sky glow luminance of greenhouses has considerably risen. In the urbanized western parts of Holland, old warehouses are pulled down for urban extension, and warehouses are concentrated in less urbanized areas. Typically, new built warehouses are equipped with high density grow lights and the scale of these warehouses considerably increased compared to traditional greenhouses. Consequently, residents in the vicinity complain about absence of darkness and light annoyance.

In this study, 750 face-to-face interviews were conducted to assess light annoyance, along with other determinants of light annoyance. The results showed that at similar light output, light annoyance was higher in residents of areas unfamiliar with greenhouses than in residents of regions familiar to greenhouses (OR=2.26, 95% CI 1.20; 4.27). Light annoyance in residents

was further associated with higher luminance of the sky glow (OR=1.26, 95%CI 1.06; 1.49). Remarkably, there was no relationship of annoyance with residential distance to the greenhouses. Personal factors, including education, gender and attitude were found to be important in explaining light annoyance of greenhouses.

The results of the study might be explained in two ways. First, the local community is not used to greenhouses and increased annoyance might be related to the sudden disturbance of darkness. Second, the new greenhouse we investigated was situated in a rural area close to a highly urbanized area. It might well be that new residents mix with local farmers. According to Smith and Sharp (2005), these new residents may bring along a different set of attitudes which might translate into greater support for farmland preservation and growth management efforts. As a result, light annoyance of greenhouses might be increased in this area.