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# URBAN REGENERATION AS A PUBLIC HEALTH INTERVENTION

## **ABSTRACT**

# Urban regeneration as a public health intervention

Urban design and planning are essential elements in how we navigate the social world. This is because urban environments typically constructed for social and cultural reasons, can create health inequalities within the urban landscape. Urban regeneration is the process of renewal or redevelopment of the social and built environment through policies, programmes and projects aimed at urban areas which have experienced multiple disadvantage. This article argues that urban regeneration is an important public health intervention and that by changing the urban physical, social and economic environment this can facilitate health development for disadvantaged communities.

# Keywords

Urban Planning, Urban Regeneration, Health Promotion, Environmental Health, Social Determinants of Health

#### SAMENVATTING

## Stedelijke vernieuwing als interventie in de volksgezondheid

Ruimtelijke ordening en stedelijke vernieuwing vormen belangrijke interventiemechanismen in sociale kwesties. Het stedelijk landschap krijgt immers mede vorm op grond van sociale en culturele overwegingen en beïnvloedt daarmee het sociaal leven. Hierdoor kunnen gezondheidsverschillen en ongelijkheden ontstaan. In dit artikel wordt bijgevolg betoogd dat stedelijke vernieuwing een belangrijke interventie in de volksgezondheid kan vormen. Stedelijke vernieuwing is gedefinieerd als het vernieuwingsproces dat in gang wordt gezet door de herontwikkeling van de gebouwde omgeving (in de breedste zin van het woord: sociaal, economisch, cultureel en fysiek). Het veranderen van deze fysieke, sociale en economische omgeving kan een positieve invloed hebben op de gezondheid van burgers in een achterstandssituatie, en kan een kader zijn voor volksgezondheidbeleid.

#### Trefwoorden

Ruimtelijke ordening, stedelijke vernieuwing, gezondheidsbevordering, sociale determinanten van gezondheid

## INTRODUCTION

Urban design and planning are essential elements in how we navigate the social world. This is because urban environments are typically constructed for social and cultural reasons, and designs therefore lead to social and health consequences, whether intended or not (Halpern, 1995). Good urban design policies instituted by planners and related professionals can be linked with positive health outcomes. For example, locating medium or high density residential developments within walking distance of public transport can be an incentive for the development of other initiatives that facilitate social interaction and encourage local residents to get out and engage in exercise (Knox, 2003).

Contemporary public health research within recent years has re-discovered an ecological perspective to public health. At the forefront is urban regeneration, a method of urban planning that focuses on changing the physical, economic and social environment. This article considers the health implications of the urban environment and the practice of urban regeneration to argue for the consideration of urban regeneration as a public health intervention to enhance health improvements in disadvantaged communities.

The first section of this paper examines the term urban regeneration. The second and third section review the health implications of urban health issues especially in relation to the interlinking health effects (both healthy and unhealthy) of social relations, space, place and health. This will be followed by an examination of urban regeneration and health in relation to the major characteristics of urban change in urban regeneration projects: housing improvements, mental health and economic impacts. To conclude, I outline a position that suggests more consideration should be placed on the incorporation of public health interventions within urban regeneration.

## **URBAN REGENERATION**

Urban regeneration is the process of renewal or redevelopment of the environment (in its widest sense: social, economic, cultural, physical) through policies and programmes aimed at urban areas which have experienced industrial decline and multiple disadvantage (Fitzpatrick, Hastings & Kintrea, 1995). An urban regeneration project is typically a partnership undertaken by local and / or central government, the local community and sometimes private developers (Johnson, Gregory, Pratt & Watts, 2000). Urban regeneration programmes use a variety of measures to improve economic, physical and social conditions in an area through integrated action (Curtis & Cave, 2001).

The historical and theoretical underpinnings of urban regeneration have their genesis in the spirit of modernity at the turn of the late nineteenth century. Urban regeneration has been known under many different names in different countries and different times such as: Slum Clearance, Reconstruction, Revitalisation, Urban Renewal and increasingly Urban Renaissance. With each of these names come different public policy objectives and aims. The re-development or rehabilitation of "depressed" urban areas has often been justified and executed as a means of improving housing and environmental conditions (Gibson & Langstaff, 1981). The term "slum clearance" and the symptoms of "urban decay", poor housing, social and environmental conditions, have been the main focus of many urban renewal initiatives, especially in post-war England (Gibson &

Langstaff, 1981). Today, urban regeneration embodies physical development and also economic objectives, such as stimulating investment and employment, as well as social objectives, such as alleviating the problems caused by poverty and disadvantage (Fitzpatrick *et al.*, 1995). Most conceptions of urban regeneration hold that physical, economic, social and health problems are entwined and that regeneration will not be sustainable unless all aspects are tackled.

## URBAN HEALTH ISSUES: SPACE, PLACE AND HEALTH

Health is affected by how we feel about a place. Opportunities for social interaction in a local neighbourhood are key to develop good health. A simple facility like a small café or landscaped garden with seating can be an important meeting place and the focus of community life, such as the Plaza common in Latin and Hispanic cultures (Low, 2000). Within the urban environment urban design and planning can influence health, for example the creation of better health by walking, running or cycling to destinations, rather than travelling by car (Knox, 2003). Alternatively poor health can be the result of low-density development or urban sprawl which has been associated with a number of adverse health, social welfare and ecological conditions (Knox, 2003).

The variance in mortality, morbidity and health within urban environments has been widely and well documented over the past 150 years. It has been suggested that there are two possible explanations for place or geographical variations in health: compositional and contextual. Observable differences in health between places may be explained by differences in the kinds of people who live in these places (a compositional explanation) or because of differences between the place (a contextual explanation) (MacIntyre & Ellaway, 2003). An implication of a compositional explanation is that poor people will have the same death rates wherever they live. Whereas an implication of a contextual explanation is that the death rates of poor or affluent individuals will vary depending on what sort of area they live in (MacIntyre & Ellaway, 2003).

Within public health sciences, in particular epidemiology and medical geography, there has been a tendency to ascribe much geographical (within country) variation to compositional differences, and until recently there has been resistance towards contextual explanations (MacIntyre & Ellaway, 2003). It has been widely argued within the public health sciences that differences between places are reducible to a difference between the types of people living there. Contextual explanations of health are frequently rejected due to the fear of falling prey to the ecological fallacy. The ecological fallacy infers that relationships observed at an aggregate level will be observed in the same direction and magnitude at an individual level (MacInytre & Ellaway, 2000; MacIntyre &

Ellaway, 2003). Concern with the ecological fallacy has led to the methodological avoidance of ecological analysis in many public health sciences, especially medical sociology and epidemiology. MacIntyre and Ellaway (2000) have argued that it is important to distinguish between two types of problems related to the ecological fallacy. The first concern is methodological with the improper use of aggregate data as proxy for individual data. The second problem concerns an ecological perspective, in the analysis of the effects of the social and physical environment on the health of individuals and/or populations. (MacIntyre & Ellaway, 2003). MacIntyre and Ellaway (2003) suggest that the distinction between people and places or compositional and contextual analysis is somewhat artificial because people create places and places create people. For example, MacIntyre, MacIver and Sooman (1993) in their analysis of area, class and health from data in the West of Scotland, suggested that the physical and social environments within the middle class areas that were studied were systematically better than those of working class areas studied in ways which might promote the physical and mental health of residents. This even included individuals who were similarly situated in terms of their personal circumstances, such as income, family size and housing standard. The middle class areas studied were more conducive to a healthy urban environment because healthy food stuffs were more readily available and cheaper, there were more sporting recreation facilities within easy reach, better public transport and more extensive primary health services and a less threatening local environment (MacIntyre et al., 1993).

While it is common knowledge within public health that certain places have better health than others, many health promotion projects and public health polices only focus on individuals (or selected ethnic groups) and their behaviours. The focus on changing health behaviours facilitates disciplinary technologies of turning working class behaviours into more middle class behaviours rather than focusing on the broad urban environment. An alternative approach would try to use urban regeneration to remake working class areas into more "middle class" areas by improving the social and physical environment. By using urban regeneration as a public health intervention it would be used in conjunction with behavioural approaches and aim to improve the aspects of the urban environment more health promoting. For example, urban regeneration projects could aim to improve the availability, quality and prices of healthy food, improve the accessibility to sport grounds and green spaces, aim to lower crime and improve primary health services.

The physical and social characteristics of the urban environment are intertwined. MacIntyre and Ellaway (2000) suggest a link between social interaction, place and health and argue that socially constructed features of the built environment or in their terminology "local opportunity structures" contribute to an individual's and community's health and well being. By this, MacIntyre and

Ellaway (1999) argue that citizen civic engagement with urban or environmental design and urban planning can influence social relations. For example, citizen participation and activism concerning the condition of housing, and the provision of play areas and parks, street lighting, and local shops, can facilitate social capital and encourage place making. The visual and real effects of urban decline, such as increased rates of crime, violence, drug dealing, graffiti and rubbish, may also create deterioration in citizen civic engagement and social interaction among people and promote unwillingness for people to get involved with others in the community (Baum & Palmer, 2002).

The need for places where people can build and maintain social interaction and relationships is essential to encourage social inclusion and encourage health development. On the other hand, the lack of these factors can influence social exclusion. The creation of places where a community can meet and interact with each other has been termed "third places": places in communities that are not domestic or commercial environments (Oldenburg, 1997). Baum and Palmer (2002) found that third places were important for participants in their study. Third places were used as important meeting places to establish or maintain loose social ties and networks. Their research also suggested that people felt it was important for their health to have places in their local area, outside of their home, that enabled people to mix socially (Baum & Palmer, 2002).

The role of the built environment and health development should be to address the critical issues of social capital and social exclusion within the urban environment. Many modern cities are not designed for easy social contact. Increasing urban sprawl and large-scale development has meant fewer public spaces in which people can gather. Local shops are increasingly being turned into large shopping malls that are dependent on transport by car. Low density urban sprawl, and minimal public transport both contribute to socially isolate more people and create few chances for social interaction. Social capital, especially social inclusion is not easily built in these environments. Collaboration between urban designers and planners to encourage denser neighbourhoods that encourage social contact and participation between people hold much promise as a method of health promotion and a major way of achieving this goal is through urban regeneration (Baum, 1999).

Recent developments in social policy and urban planning have highlighted the role of spatial policy and the use of space as a significant dimension in social exclusion and associated negative health outcomes (Buck, 2001). Residential sorting that concentrates the most disadvantaged people in the least advantaged neighbourhoods is not a new social phenomena. The concentration of urban poor in a particular geographical neighbourhood means that resident opportunities for social interaction is more confined to their neighbourhood of residence, especially for those lacking economic resources

(Somerville, 1998). The concentration of the urban poor into neighbourhoods mainly because of economic disadvantage means that cities can become spatially segregated along social class lines. Residential segregation is a form of spatial exclusion that is heavily influenced by social factors. Social scientists have termed these areas as "ghettos" which have a politicised meaning (see Hannerz, 1969).

Spatial exclusion is often experienced by those facing multiple disadvantage. For example, in New Zealand, Maori (New Zealand's indigenous people) face great health inequalities compared to other ethnics groups such as New Zealand Europeans, and are increasingly segregated within urban environments. It has been shown that the larger the Maori population within urban areas, the more segregated those Maori are in residential areas compared to other ethnics groups such as New Zealand Europeans (Johnson, Poulsen & Forrest, 2005). The reasons for this are likely to be a combination of many factors. It has been suggested that Maori are more likely to be disadvantaged and in the lower percentiles of the labour and housing markets and more likely to be concentrated into separate areas to enhance their own economic and cultural security (Johnson et al., 2005). However, within New Zealand's largest cities Auckland and Wellington, the degree of residential segregation of Maori is less than in other places with a comparable Maori population. The reason for this is because of residential sharing of space by Maori and Pacific Islander ethnic groups. When both Maori and Pacific Island ethnic groups are combined into a single Polynesian group, it was found that the larger the urban area and the larger the Polynesian component of its population, the greater the residential segregation and spatial exclusion of its Polynesian population (Johnson et al., 2005). Within the urban environment factors like spatial exclusion influence health and direct the agenda for health improvements for urban regeneration projects. I now will address the health implications of urban regeneration projects.

## **HEALTH IMPLICATIONS OF URBAN REGENERATION**

In this section my primary aim is to examine the positive and negative health implications for urban regeneration. In doing so I will examine the health and social effects of urban regeneration on housing improvements, mental health and economic impacts on participants' health outcomes within urban regeneration projects.

## Health and social effects of housing improvements

The links between housing and health have been well known for many years. Housing improvement has been a central initiative to create better health in areas experiencing urban

decline. Allen (2000) has stated that urban regeneration schemes rarely operate at the micro process level, and argued that significant changes in health are likely to occur only over a relatively long period. Despite this fact, there have been many studies that have shown that health and social well-being are influenced by housing improvement. In a systematic review of forty-five intervention studies of the health impact of housing improvement from 1887 to 2007 Thomson, Thomas, Sellstrom and Petticrew (2009), identified improvements in general respiratory and mental health following warmth improvement measures, but these health improvements were varied across studies. Thomson *et al.* (2009) also noted varied health impacts were reported following housing led urban regeneration especially in the developed world, such as the United Kingdom, United States of America, Western Europe and Australia. This review suggests that housing improvements can generate health improvements and that there is little evidence of detrimental health impacts. The authors cautiously note that the potential for health benefits may depend on baseline housing conditions and the careful targeting of the specific aims of intervention (Thomson *et al.*, 2009).

Not all research into housing improvements describe positive improvements, some outline negative outcomes associated with housing renewal projects. The Forest Gate and Plaistow Sustainable Communities Project carried out in London, England, showed that the negative effects of housing improvements and health were mainly the result of risks due to disruption, pollution and accident hazards from the building works (Curtis & Cave, 2001). The residents in this project also expressed dissatisfaction with the fact that the housing improvements were unable to help everyone currently living in the program area (Curtis & Cave, 2001). The Forest Gate and Plaistow Sustainable Communities Project highlights that health benefits from urban regeneration might be selective and uneven in the populations in which projects are implemented. Other studies have shown that housing improvement can have adverse effects on residents because of increased rents. For example in Stepney, England rents increased by 14.8 percent, which affected a household's ability to buy adequate food, and became a barrier to employment opportunities (Ambrose, 2000 cited in Thomson, Petticrew & Douglas 2003). Such negative aspects of housing improvements can also influence other health factors such as mental health.

## Mental health and urban regeneration

Mental health is strongly impacted by housing improvements and urban regeneration projects. Studies by Green and Gilbertson (1999) and Green, Ormandy and Brazier (2000) found positive improvement to self-reported mental health one month to five years after the housing

improvements were completed. These positive health improvements were related to improvements to physical aspects of housing, such as improvements to windows, bathrooms, fencing of semi-private space, the closing of alleyways, traffic calming and improved child playground facilities (Curtis, Cave & Coutts, 2002). Psychosocial changes associated with these improvements were found to: reduce anxiety and depression, improve self-esteem, reduce fear of crime and create a greater perceived "friendliness" of the area (Curtis *et al.*, 2002). However, a longitudinal study of an urban regeneration project in South Manchester, England found no improvement over time in mental health for those in the area undergoing urban regeneration (Huxley *et al.*, 2004). This study found that the urban regeneration initiatives may have had little impact on mental health because it failed to address the concerns of local residents, and failed to remove restricted opportunities, a variable closely related to mental health (Huxley *et al.*, 2004).

# Economic impacts and urban regeneration

Closely associated with mental and physical health are economic issues which have various health implications for urban regeneration projects. The majority of urban regeneration and economic initiatives are often solely focused on unemployment and training schemes. There is a growing body of research showing that unemployment, insecure employment and work that offers low social support to workers' and high ratios of effort to reward, are associated with poor health outcomes (Curtis et al., 2002). There are many material and psychosocial effects associated with unemployment for workers, their families and communities. The negative material effects associated with unemployment and/ or insecure employment include low income, poverty, low standards of quality of life, poor housing and poor health determinants (Curtis et al., 2002). There are also negative mental health effects associated with urban regeneration projects, such as unemployment after the completion of the project. Unemployment can influence a person's health by contributing to greater uncertainty, lack of choices and control in life, disruption of life plans and negative social stigma (Curtis et al., 2002). Curtis et al. (2002) also mention that there is little evidence so far that urban regeneration creates changes to neighbourhood economic conditions. The authors also suggest that individual participation in schemes to improve employability is unlikely to have positive effects on the health of those who are disadvantaged in the labour market (Curtis et al., 2002).

Urban regeneration schemes with an economic focus do not always produce employment benefits to the populations of the targeted area. Glen (1998 cited in Curtis *et al.*, 2002) has observed that new employees are often "imported" from outside of the area to meet the expanding labour

market or to fill skilled job shortages. It has been advocated that urban regeneration areas needed to make special measures to enable local people to compete effectively for new jobs in the area in order to create an environment where positive health outcomes are possible (Curtis *et al.*, 2002). This means that economic regeneration programmes need to include the creation of employment opportunities within disadvantaged neighbourhoods, and strategies that aim to build links between excluded areas and the wider labour market. Economic regeneration strategies are needed to be made through inter-sectoral solutions in order to create the opportunities for health development (McGregor & McConnachie, 1995).

Urban regeneration measures can produce changes which bring real benefits to individuals and communities, including health improvement. However urban regeneration can introduce change and disruption into people's lives. The often onerous and stressful experiences of regeneration programmes may produce short-term negative psychosocial heath outcomes. It seems likely that these difficulties result from the degree of disadvantage to be overcome. Curtis *et al.* (2002) have noted that consultative mechanisms do not always allow participation by those socially excluded in neighbourhoods, who are most likely to be affected by urban regeneration schemes. The groups who are omitted from or who do not attend standard consultation are likely to be the most difficult to reach sectors of the local community who are poorly represented in the democratic process. In the next section I will outline a set of considerations to enable urban regeneration to be seen more as a public health intervention in order to enhance health in disadvantaged communities.

## URBAN REGENERATION AS A PUBLIC HEALTH INTERVENTION

Changes to the built and social environment through urban regeneration can provide changes to the determinants of health. The relationship between place and health in reference to urban regeneration suggests that local physical amenities and resources were closely associated with social relationships and symbolic meaning (Forrest & Kearns, 1999). For example, communities that experience urban decline where small local shops were closed lost not only access to retail outlets, but also access to the shopkeepers who were often key community stakeholders and leaders (MacIntyre & Ellaway, 2003). Places within communities are important sites of social interaction. When public services, such as banks or post offices closed, residents suffered not only from poorer quality services but also felt that the removal of these services indicated a lack of interest in or support for the neighbourhood from service providers (MacIntyre & Ellaway, 2003). Social factors such as crime and violence could hasten or trigger the closure of shops, banks and post offices. The prevalence of delinquency and vandalism can be influenced by physical features

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of the environment, such as empty or abandoned properties, bad or inadequate street lighting (MacIntyre & Ellaway, 2003). Urban regeneration projects that focus interventions on physical development through improvements to environmental design and lay-out can influence patterns of social interaction. Thus, changing features of the built environment to include the provision of improved physical amenities such as street lighting, street cleaning, shops and banks, may help to facilitate the regeneration of social interaction and a "feel good" sense about a place (MacIntyre & Ellaway, 2003).

I wish now to highlight some issues that should inform public health practice in urban regeneration interventions that take into account the influence of health development. Urban regeneration projects need to focus on physical features of the environment shared by all residents in a locality, for example air, water quality, decent housing, secure employment, and safe play areas for children. Urban regeneration projects also need to focus on services in the community that provide support for people in their daily lives, such as education, transportation, street cleaning, street lighting and policing. The socio-cultural features of a locality, including the political, economic, ethnic and religious history and the degree of social integration also have to be addressed for the urban regeneration of an area to be successful as an intervention (MacIntyre et al., 1993).

If urban regeneration is to enhance and mitigate social inequalities in health, it needs to implement policies that concentrate on the following initiatives:

- 1. Urban Regeneration should focus on the public health issues of people and places. Urban regeneration policies should be focused toward people and places, as the exclusive targeting of the most deprived areas will not help materially and socially disadvantaged people or households living in slightly better off areas. Exclusive targeting of individuals in either health education programmes or income redistribution often does not address geographical and social variations in employment, education, or land use (MacIntyre & Ellaway, 1999).
- 2. A holistic view of urban regeneration is needed that gives equal attention to all aspects of the environment. Urban regeneration policies should be directed towards the physical and social environments. Urban regeneration policies that solely focus on physical inputs or have not involved local people or considered patterns of social relations, and cultural values in to urban regeneration projects have often failed. Equally, community development policies that only focus on the social environment may ignore important aspects of the physical environment, such as street lighting, and third places. So it is therefore important for planning regulations

- to place importance on green spaces, safe play areas and community facilities that encourage interaction and sustainable uses.
- 3. The use of health impact assessments in decision making. Central and local government, private and local voluntary services should be encouraged to undertake health impact assessments especially in relation to the analysis of health inequalities (through an understanding of the broad views of the determinants of health) on all polices and plans that might have an impact on the health of the local areas (MacIntyre & Ellaway, 1999). There is general agreement within the literature that poorer people have poorer health, in part because they live in places and spaces that can be damaging to their health (Baum & Palmer, 2002, p. 352)

It is therefore critical that urban regeneration should be seen as a public health intervention, enhancing the social determinants of health through the organized efforts of society and healthy public policy and practice.

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