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Area-based interventions to ameliorate deprived Dutch neighborhoods in practice: Does the Dutch District Approach address the social determinants of health to such an extent that future health impacts may be expected?

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ABSTRACT

Objective: We studied the local manifestation of a national procedural program that addressed problems regarding employment, education, housing and the physical neighborhood environment, social cohesion, and safety in the most deprived neighborhoods in the Netherlands. We aimed to assess if such a program, without the explicit aim to improve health, results in area-based interventions that address the social determinants of health to such an extent that future health impacts may be expected.

Methods: We used standardized questionnaires and face-to-face interviews with 39 local district managers. We analyzed the content of the area-based interventions to assess if the activities addressed the social determinants of health. We assessed the duration and scale of the activities in order to estimate their potential to change social determinants of health.

Results: Most districts addressed all six categories of social determinants of health central to the procedural program. Investments in broad-based primary schools, housing stock, green space, and social safety seemed to have the potential to result in district-level changes in social determinants. The scale of activities aimed at employment, income, educational attainment, and the social environment seemed too small to expect an impact at the district level.

Conclusion: We conclude that the area-based interventions addressed the neighborhood environment to such an extent that future health impacts of the Dutch District Approach may be expected. The health effects in the long term might be more substantial when area-based interventions were devoted more to the improvement of the socioeconomic circumstances of residents.

Introduction

When striving for health equity, we need to find ways to tackle the unequal distribution of money, power, and resources as well as to improve the circumstances in which people are born, grow, live, work, and age, also called the social determinants of health (WHO, 2008). However, we still lack sufficient knowledge on evidence-based strategies addressing these social determinants of health, such as employment, housing, and transport (Bambra et al., 2010; Lorenc et al., 2012; Whitehead et al., 2004).

Area-based interventions that target deprived neighborhoods are one possible way to deliver the complex interventions needed to tackle the social determinants of health and their distribution. They are often employed as a means to address problems that are spatially concentrated or due to area dynamics (Lupton, 2003; Strattford et al., 2008). Appealing examples of such area-based initiatives to improve health are Health Action Zones (Barnes et al., 2005) and the New Deal for Communities (Batty et al., 2010a). Experiences thus far have, however, failed to come up with conclusive empirical evidence showing positive health impacts of area-based interventions (Batty et al., 2010b; Thomson, 2008).

It has been suggested that the lack of positive health effects of area-based initiatives is due to the way these initiatives manifest themselves: in particular the often unfocused, unsubstantial, and short-term character of the area-based interventions for the type and scale of change envisaged might explain why these initiatives do not result in a substantial improvement of health (Barnes et al., 2005; Hawe et al., 2004; Thomson,

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2008). For example, Health Action Zones were thought to be not substantial enough and did not survive long enough to make any real impact on indicators of population health or health inequalities (Barnes et al., 2005). Explanations for the New Deal for Communities' disappointing impact on health, given the resources devoted to improve health outcomes, include the small scale of interventions, the nature of some of the interventions, and the difficulty of picking up small numbers of beneficiaries in sample survey data (Batty et al., 2010b).

The (lack of a) health impact of area-based initiatives can often not be related to the interventions that have been carried out, because the evaluation studies tend to not report in detail on the content and scale of activities (Egan et al., 2009). Such empirical analyses proved particularly difficult because area-based initiatives typically comprise multiple and varied interventions delivered over a longer period of time. They constitute complex interventions, constructed from a number of components, which may act both independently and interdependently (Campbell et al., 2000). Furthermore, the necessary variation between different areas – due to the adaptation of the interventions to the local context to enhance an area-based initiative's potential effectiveness (Hawe et al., 2004; Kintrea, 2007) – further complicates but also compels careful elucidation of their actual manifestation (Durlak, 1998). Thus, a detailed appraisal of their content, duration, and scale is essential to understand complex interventions and its final outcome and impact (Durlak and DuPre, 2008; Egan et al., 2009; Petticrew et al., 2005).

In this study, we describe the local manifestation of a national procedural program in the Netherlands that addressed problems regarding employment, education, housing and the physical neighborhood environment, social cohesion, and safety to improve the livability in severely deprived districts in the Netherlands. These area-based initiatives, which have no explicit goal of improving the health of neighborhood residents, might impact health if the activities employed lead to substantial changes in the major social determinants of health. We aim to assess if such a procedural program results in area-based interventions that address the social determinants of health to such an extent that future health impacts may be expected. In order to do so, we made a detailed analysis of the content, duration, and scale of the local area-based interventions.

Methods

Intervention

The District Approach was launched by the Dutch government in 2007. Until 2012, around 5 billion euros (Tweede Kamer, 2011) had been spent to ameliorate problems with employment, education, housing and the physical neighborhood environment, social cohesion, and safety in the 40 most deprived districts in the Netherlands. The districts were selected using registry-based physical and socioeconomic deprivation as well as physical and social problems reported by residents. The 40 districts are situated in 18 large Dutch cities, so they all have an urban character, with some variation from one city to the other (Lörzing et al., 2008).

The District Approach can be considered a procedural program for which the national government laid down a broad thematic framework and provided funds, support, and expert advice. Local authorities were given the autonomy to deliver locally tailored activities and to organize accountability locally. Each district developed an action plan tailored to its specific local problems and needs regarding employment, education, housing, social cohesion, and safety. The national government had no say in the content of the local District Approach, the local organization, nor the choice and implementation of certain interventions to achieve the local goals set. In 2008 (or in rare cases, in 2009), the districts put their plans into action and have been carrying out the interventions since then. As such, the District Approach can be seen as a series of complex area-based intervention adapted to 40 different contexts.

Survey methodology

We carried out a multiple-case study of the local manifestation of the Dutch District Approach in 40 districts between 2008 and 2011. This data collection is part of the URBAN40 study, which aims to evaluate the health impact of the area-based interventions that are part of the Dutch District Approach in the future. At the end of 2011 and in early 2012, we retrospectively collected data on the interventions that had been carried out since 2008 (content, duration, scale).

We developed a standardized questionnaire that prompted the district manager to describe the content of the activities as well as the date the intervention started and ended to determine the duration of each activity. The questionnaire focused on 17 different types of activities, representing all six categories of social determinants of health central to the District Approach (Table 1, first column).

The face-to-face interviews with the district managers further clarified the content of the activities, when necessary, and provided information on the number of participants, neighborhood changes or scope of each of the reported interventions. At the start of the interview, they reported the three types of activities that they felt were most intensively addressed in their district.

Data collection procedure

The questionnaire was sent to 40 local district managers in September or October 2011. All types of actions included in the questionnaire were described in detail and illustrated by one or more examples from local experience. To assist the managers, we had already referred to those interventions in the questionnaire that had been mentioned in the initial local district plans developed in 2007 and 2008. The managers were asked if these plans had indeed been implemented and if any other activities had been developed in the meantime so that all interventions carried out since the District Approach was introduced, would be recorded.

Some district managers referred us to local records of activities, for example, progress reports or websites with performance monitoring data. We used these local data sources to extract the relevant information on the content and duration of intervention. This was done for Amsterdam (5 districts), Utrecht (4 districts), The Hague (4 districts), Arnhem (4 districts), Groningen (2 districts), Deventer (1 district), and Rotterdam (4 out of 7 districts). The subsequent interview was then used to address remaining uncertainties regarding content or duration of the activities as well as to obtain information about the scale of activities.

We interviewed 39 district managers working in 38 deprived districts between November 2011 and February 2012 for about one and a half hours. In one district, we were not able to talk to all the district managers involved. Another district was not able to separate and quantify the types of activities. Two district managers refused to participate. This left 36 deprived districts for analysis.

Analysis

First, we analyzed the content of the area-based interventions in order to assess what social determinants of health were addressed by the activities. For each district, we listed all reported activities in each of the 17 types of action that we distinguish (Table 1).

Second, we analyzed the duration and scale of the activities in order to assess their potential to change the social determinants addressed. In this context, we assumed that all reported activities were effective in the sense that they produced the changes in determinants envisaged, e.g. debts will actually be reduced or housing quality really improved. For each district, we listed all activities in each of the 17 types of action for longer than 1 year, and subsequently added up the number of participants, users, or neighborhood changes per type of activities. Next, we estimated the scale of the combined activities per type of action to be smaller (no change expected), intermediate (small changes expected), or larger (substantial changes expected) (Table 1, third column) based on the level of impact and the gathered information on their number of participants, neighborhood changes or scope;

1 Interventions that affect participants (P), such as unemployment measures, debt assistance, school dropout prevention, or improving housing quality. District managers estimated the number of participants in these activities. Interventions that affect the participants or users need to reach sufficient numbers of residents to change the neighborhood average. We defined participation of 5% of the neighborhood population as larger-scale activities and participation of less than 1% of the population as smaller-scale activities.
2 Interventions that produce neighborhood changes that only affect users (U), such as broad-based primary schools, public parks or gardens, footpaths or bicycle paths, playgrounds, or sports facilities and activities. We defined