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Health, well-being and social relations in a changing neighbourhood

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Health, well-being and social relations in a changing neighbourhood: protocol for a prospective, multimethods study of the consequences of large structural changes in an ethnic diverse social housing area in Denmark

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ABSTRACT

Introduction Residential areas constitute an important arena for health, well-being and social relations. Structural interventions such as demolition and area renewal have been used to reduce inequality in health and well-being in disadvantaged areas. However, the effects of larger structural interventions are inconclusive. In a longitudinal perspective, this study aims to analyse how large-scale structural changes in an ethnic diverse social housing area are associated with the residents' health, well-being and social relations.

Methods and analysis In this multimethods study, we examine this aim among middle-aged and older residents in a multiethnic social housing area in a Danish municipality by the inclusion of comprehensive survey (in 2018, 2019 and 2020), register (yearly 2015–2025) and qualitative (2018–2020) data. Municipal Health Profile survey data from 2017 and 2021 will be used for comparison. The area will undergo large structural changes in the built environment during 2018–2021. A 'natural experiment' (n=6000) compares differences in health and social outcomes across the study period between the study area and a similar neighbouring area not undergoing structural changes. Through user engagement in the design of the study, throughout the different phases of the study and in the two co-created interventions embedded in the study design, a focus on empowerment and recognition of the resources and perspectives of residents are encouraged.

Ethics and dissemination The study is registered in the University of Copenhagen's record of biobanks and research projects containing personal data and will be conducted in accordance with the principles of the Helsinki Declaration. Residential and municipal representatives and local non-governmental organisations are engaged in the design and execution of the study to ensure the usefulness, reflexive interpretation of data, and relevance of interventions. Results will be published in international peer-reviewed scientific journals, presented at conferences and as short reports through the use of both written and visual outputs.

Strengths and limitations of this study

► The study provides insight into effects of large-scale structural changes in a longitudinal perspective and through use of multiple methods, thereby increasing our understanding of how changes affect the health, well-being and social relations among residents from different perspectives.

► Through user engagement in the design of the study, throughout the different phases of the study and in particular in the two co-created interventions embedded in the study design, a focus on empowerment and recognition of the resources and perspectives of residents is encouraged.

► Due to the highly context-dependent findings and that response rates are likely to be lower than optimal given the socioeconomic characteristics and cultural/linguistic diversity of the community, care must be taken when extrapolating findings beyond this study, and more research, preferably with comparative designs, are encouraged.

INTRODUCTION

Neighbourhoods as arenas for health, well-being and social relations

Residential areas, or neighbourhoods, constitute an important arena for health, well-being and social relations.[1] Thus, access to adequate housing, green areas, trustful and safe encounters with residents living in the same neighbourhood, social relationships and community services, both formal and more informal services, are important for people's health and well-being in different life phases.[2–6] Furthermore, the WHO defines a healthy city as one that is continually creating and improving those physical and social environments and expanding those

community resources which enable people to mutually support each other in performing all the functions of life and developing to their maximum potential.[7] Inequalities in health, well-being and social relations across different neighbourhoods are often associated with socioeconomic status and increasingly also with ethnic minority background of residents.[2 8] Governments and communities worldwide have used different kinds of structural interventions such as house improvements, demolition, area renewal and other approaches in an attempt to reduce inequality in health and well-being and secure safety for residents in disadvantaged areas.[9 10] Projects focusing on urban development have also been recommended by the WHO as a mean to improve health for residents and decrease inequalities in health.[11 12] However, when investigated, the effects of larger structural interventions such as demolition in disadvantaged neighbourhoods on health status and well-being are inconclusive with some studies finding an improvement in mental health, physical health and well-being following large-scale structural changes and others finding either no or negative effects. In addition, the investigated interventions seldom take into account the residents' perspectives on the structural change.[13–20] The aim of housing improvements is often to attract new more resourceful residents, why a change in health over time within an area may reflect a change in the composition of the population rather than a pure effect of the structural changes.[9] Thus, whereas structural interventions based on changes in the built environment have been employed in an attempt to increase health and well-being, decrease crime rates and diversify population characteristics towards less socioeconomic disadvantaged residents, the overall effects on health, well-being and social relations of such interventions are inconclusive, and little is known regarding perspectives of residents on these complex processes over time.

Non-profit social housing in Denmark

The non-profit social housing sector is specific to Scandinavia. In Denmark, a little <1 000 000 people (close to 20% of the population) live in this type of housing. This reflects the underlying ideology that non-profit social housing is intended for everyone regardless of income or social status.[21] In a Danish and more widely Scandinavian context, non-profit social housing comprises rental apartments and houses that are distributed based on waiting lists, but up to 25% may be assigned by the municipalities to individuals and families in specific need for housing due to, for example, divorce or to newly arrived refugees. The sector is subsidised through tax exemption and a financial acquisition combination of state-subsidised loans, interest-free loans from local governments and a smaller tenant contribution. The rent is fixed according to the costs and is generally affordable also with lower incomes.[21] Whereas social housing in some contexts may be associated with substandard housing conditions, it is generally of a good standard in the Scandinavian countries. Nevertheless, in Denmark, more deprived non-profit social housing areas are located in and around the major Danish cities and are characterised by ethnically diverse residents experiencing relative socioeconomic disadvantage and poorer health compared with both the municipalities they are located in and the national average.[22 23]

For >30 years, disadvantaged non-profit social housing has been a subject of discussion in Denmark. Debates in recent years have focused on the intersection between lower socioeconomic background and ethnic minority status of residents in selected areas. These are denoted as 'ghetto areas' based on a number of indicators including proportion of residents with non-Western ethnicity (immigrants and descendants), with low income and level of education, as well as higher crime rates.[24] An increasing number of Danish municipalities are currently taking steps to improve non-profit social housing areas that have experienced decline in economy among residents and in the local built environment with a special focus on neighbourhoods included on the government's so-called 'ghetto-list'.[25–27] Structural changes and changes in the composition of residents living in these areas are some of the goals of the most recent governmental policy that will affect neighbourhoods across Denmark.[28] In late 2018, a majority in the Danish Parliament passed through a new law with massive consequences for the non-profit social housing areas. The criteria for being labelled as a 'ghetto' was broadened leading to an increased number of social housing areas on the list. One consequence of being on the list is that the share of non-profit social housing residences must be reduced to a maximum of 40% by 2030, meaning that 60% of the residences will have to change the status to, for example, owner-occupied or senior citizen/youth housing. Another consequence is that only 30% of new children enrolled in a day care institution within the area are allowed to be living in the area itself. It has been suggested that the Danish 'Ghetto Plan', which aims to increase local community participation and volunteering, could have the unintended consequence of increasing social and health inequalities rather than reducing them.[29]

Description of the study setting

This research project is based on one of these so-called 'ghetto' neighbourhoods located in a municipality close to Copenhagen. This non-profit social housing area was established in 1972 and consists of a total of 915 apartments and approximately 2600 residents. The area is ethnically diverse with residents representing around 50 different nationalities. Challenges related to the quality of housing and to social and local environmental dynamics have been rather profound, and funding into improving the area has been substantial since the mid-1980s. A wide range of social housing initiatives have also been implemented focusing on well-being, crime prevention initiatives, education and employment. Despite the many physical and social housing initiatives, challenges remain in terms of, for example, the proportion of children receiving lower grades in primary schools, the proportion

of adults without formal education, the crime incidence and the low-income levels, all of which make the area more disadvantaged compared with the municipality as a whole. In general, there is a high degree of turnover in residents which may partially explain the observed smaller effects of the massive investment in social housing initiatives over time.

In late 2016, in recognition of the continued challenges affecting the neighbourhood, it was decided to move forward with a suggested community development plan. This was done in a collaborative process with municipal decision makers, local resident representatives, the housing association (KAB, Københavns Almene Boliger) and a national building fund (Landsbyggefonden). The plan includes a significant structural change in the built environment. Eight out of 38 apartment blocks centrally located in the area is to be demolished corresponding to 188 apartments, to leave room for a culture house, a day care and a primary school. Residents living in the apartments to be demolished are offered rehousing within the neighbourhood, in other non-profit social housing in the Municipality or in other cities in Denmark. Included in the plans was also the establishment of senior citizens apartments and a better infrastructure connection to the surrounding communities. The original time plan suggested demolition to take place in 2018, but due to the above-mentioned major changes in national policy leading to new legislation for the so-called 'ghetto-areas',[28] it was postponed to 2019.

Changes in resident characteristics due to moving in and out of the social housing areas in Denmark are well described. In a recent report on the moving patterns of residents in deprived social housing areas in Denmark, it is shown that younger people tend to move both in and out of deprived social housing areas more frequently than the older.[30] The more permanent residents have a mean age of 40 years, whereas those moving in and out during a calendar year have a mean age of 27 years. In the same report, it was stated that approximately 14% of the residents moved out and an equal proportion moved into these areas during 2012, with a relatively stable pattern over a 15-year period. However, concerning our target area, the local municipality has reported a higher proportion of residents moving in than out of our target area during 2016 (11%).[31] This pattern will inevitably be different in 2018–2019, as the residents of the 188 apartments to be demolished have been rehoused. In general, a selective moving pattern characterises the deprived social housing areas in Denmark. Those moving in have a lower income, poorer educational level and poorer attachment to the labour market compared with those moving out of the areas, as well as compared with the more permanent residents.[30] Based on the above, we expect a relatively large share of our middle-aged and older survey participants to stay in the area across the study period, and that the area will remain relatively deprived with the potential of a positive change after the large structural changes which may attract/retain more resourceful

residents. However, due to the rehousing of those living in the housing blocks to be demolished, moving out of the area will also happen to those who have been living there for many years including the middle-aged and older residents as well as the more resourceful if they do not succeed to be rehoused within the area.

The community development plan for this specific area constitutes a unique opportunity for evaluating the effects on health, well-being and social relations of a major structural intervention in a specific housing area as it unfolds over time. At the same time, it will be possible to implement and evaluate co-created interventions during the project period based on the residents' perceptions and resources, enhancing their empowerment and engagement in a period with significant changes in their neighbourhood affecting their everyday lives. The knowledge obtained will be of relevance to both the specific area and for other similar regions in and outside Denmark.

The period during the demolition and rebuilding will cause noise, dust and general disturbance in the area as the structural changes are taking place in the middle of the blocks that are to remain. Data collected during this period will make it possible to study the potential differences in health, well-being and social relations compared with the periods before and after the structural changes.

Aim and objectives

In this study, we examine the development in health, well-being and social relations among middle-aged and older residents (45+ years) during a 4-year period from 2018 to 2021 in a multiethnic non-profit social housing area in a Danish municipality undergoing large structural changes in the built environment. The study will apply a prospective multimethods design including a 'natural experiment' and two embedded co-created interventions. Our primary objectives are to study:

1. How health, well-being and social factors develop in the study area compared with a neighbouring multiethnic non-profit social housing area not undergoing structural changes in the study period. Furthermore, how this development compares to the residents of the municipality as a whole.
2. To develop co-created interventions based on a thorough qualitative and quantitative needs assessment at baseline aiming at maintaining or increasing well-being and social cohesion.

Novel in this area, graphic illustrative tools will be included as an instrument to increase communication success.

METHODS AND ANALYSIS
Study design

A multimethods approach will be used to analyse how a large-scale structural change in a multiethnic social housing area are experienced by the middle-aged and older residents, and how the changes are associated with health, well-being and social relations at the individual

and aggregated level across time before, during and after the structural changes in the period 2018–2021. Each substudy is described in more detail below and in table 1.

Qualitative interviews with residents representing the two largest ethnic groups together with an interviewer driven one-to-one baseline survey conducted in eight languages will serve as a needs assessment for two interventions. These are to be planned in a participatory process building on co-creation with the residents and local stakeholders representing municipal and non-governmental health and social care services. Visual and graphical facilitation methods will be employed in the development and implementation of interventions to facilitate the participation of individuals with lower levels of literacy and/or language barriers.

Patient and public involvement

The research questions and outcome measures were developed based on the experiences from our previous smaller scale 12-month intervention study (in 2016/2017) among the older residents in the same social housing area involving residents and local stakeholders. The residents of the area are involved in the design of the present study in several ways. The board of residents approved the application for the present project, and residents are engaged through regular meetings in particular in relation to the co-created interventions. Local resident communication ambassadors, the board of residents and local stakeholders have been involved in the recruitment of respondents to the survey and qualitative interviews as well as for the interventions.

We plan to disseminate findings from the study to the participants by local events such as the Ramadan dinner, through the study website (strit.ku.dk) and at larger annual meetings arranged by the research team in collaboration with the board of residents inviting all study participants.

Setting

The study is situated in the above-mentioned non-profit social housing close to Copenhagen, Capital Region, Denmark. The housing area is inhabited by ~2500 residents and includes >50 nationalities. The questionnaire was translated into seven languages from the Danish original version. Guided by register-based information on country of birth, the native languages that had the largest representation in the area were identified. These were: Turkish, Arabic, Polish, Vietnamese, Urdu and Pastho. Speakers of all other languages were interviewed in English, which, for the majority, was not their native language.

Participants

The survey part of the study (n=600 invited for each of the three waves) includes all residents aged 45+ years residing in the area at the relevant data collection points from August 2018 to ultimo 2021. The qualitative part of the study (n=31) includes residents aged 40+ years

with Danish or Turkish origin who were residing in the area in March–August 2018. The slightly younger age profile of the participants in the qualitative part emerged during recruitment processes, where we, for ethical reasons, have decided to include residents eager to participate despite their younger age. The register part of the study will include residents of all ages in the study area and a neighbouring multiethnic non-profit social housing area, which will serve as a control area. Data will be retrieved for the period 2015–2025. The two areas have approximately the same number of residents (n=2500 each) in 2018.

The main reason for our focus on the middle-aged and older residents in our three survey waves, the qualitative needs assessment interviews and the interventions is a genuine interest in this somewhat understudied age group and their experiences regarding health, well-being and relations across times with large structural changes. However, in the part of the study where we use register-based information to compare our target area with the control area, we include all age groups. We are able to follow all residents who at any point lived in the two areas during the full study period in the registers for information on social and health variables as well as to where those who moved out have moved.

Surveys

Three in-person interviewer-driven survey waves among all residents aged 45+ years will take place during the 4-year study period (2018, 2019 and 2020/2021) to ensure data collection covering before, during and after the structural changes to the area. The third wave will take place approximately 1 year after the structural changes have been finished. The survey was developed selecting relevant items measuring health, well-being and social relations. Items, which previously have been used in comparable study populations, were preferred as was validated instruments (see Appendix with survey items). The full survey in Danish was pilot tested among three men and women in the neighbouring non-profit social housing area, which lead to minor changes in item formulation. As mentioned above, the survey was subsequently translated by two independent professional translators in each of the seven languages, and a consensus version between the two was negotiated by the translators at a 3-hour meeting in the presence of 1–3 of the following authors (RL, JM and MK). Trained interviewers native in the relevant languages will perform the in-person interviews either in the household of the participant or in offices in the area depending on the preferences of each participant. The survey is going to be collected on a digital survey platform (SurveyXact) using tablets for the languages Danish, Turkish, Polish, Vietnamese and English. The right-to-left text direction was not available in SurveyXact, and consequently, the survey is going to be administered on paper for the languages: Arabic, Urdu, Pashto and subsequently manually typed into the Danish version of SurveyXact. The names, addresses and country

Table 1 Overview of aim, methodology, data sources and analyses of each substudy

Sub-study	Aim	Methodology	Study population	Analyses
I	To study development in health, well-being and social relations across the study period comparing the study area to the full municipality at the individual and aggregated level	Surveys in the study area in 2018, 2019 and 2020/2021 and the Health Profile of the Municipality 2017 and 2021	Residents 45+ years with address in the study area at any point in the period 2018–2021 (n=700) Respondents to the Health Profile in 2017 and 2021 (n=1000)	Descriptive statistics, logistic and linear regression analyses
II	To compare individual and aggregated level differences in register-based information on health and social variables across time in the study and control area	Natural experiment register-based	All residents with address in the study and control areas at any point in the period 2018–2021 (n=6000)	Descriptive statistics, logistic and linear regression analysis, Cox regression analysis Difference-in-difference Propensity score matching
III	To explore the major themes regarding health, well-being and social relations in the two ethnically largest resident groups	Qualitative study Semi-structured interviews	Residents aged 40+ years with Danish or Turkish background (n=31)	Data will be coded into meaningful units and summarised into main themes exploring in depth the experiences of residents awaiting structural neighbourhood changes
IV	To develop two interventions with a focus on increased participation in and perceived relevance of health promotion activities that are community-based, participatory and diversity-sensitive	Co-creation of interventions with residents based on needs-assessment from the survey and qualitative substudies I and III	Residents aged 45+ years in 2019 (intervention 1) and in 2020 (intervention 2)	Process and effect evaluation of the two interventions

of birth will be retrieved from Statistics Denmark for residents aged 45+ years. Contact with residents will be obtained by interviewers native in the language given by country of birth, knocking on the residents' door asking them if they want to participate, with an invitation letter being sent to them up to 2 weeks beforehand. We estimate that approximately half of our participants will be the same from wave 1 to 2 of the survey, it is more difficult to estimate how large a proportion will still be residing in the area at wave 3, but presumably between a third and up to half of the initial respondents.

Communication strategies to increase awareness of the surveys are employed, for example, through posters, a quarterly newsletter, social media groups for residents and through brief presentations at neighbourhood events such as the annual Ramadan party and the summer party.

In 2017, a survey called the Health Profile was undertaken in a random sample of residents of the municipality where our study area is located. The Health Profile is part of a regular National survey-based data collection including information on, for example, health, health behaviour, psychosocial and social factors. The data collection takes place approximately every 3–4 years. There is considerable overlap between items in our study population and the Health Profile, so it will be possible to compare scores. The Health Profile is to be repeated in 2020 making it possible to compare our surveys 2 and 3 with the municipal scores.

We expect a somewhat lower response rate than usually attained in Danish population-based studies due to the vulnerable population in the target area (poorer health, socioeconomic background and more diverse ethnic background). We expect that 30%–40% of our population will participate. Clearly, this implies the risk of selective responses, as we expect a lower response rate among those with the poorest health and socioeconomic backgrounds as well as those who do not speak one of the eight languages available in the survey. We are considering, including different analytical tools, to diminish the risk of selection bias such as inverse probability weighting and bias analyses. In the register-based analyses, there will be a very low risk of selection bias as all residents with a registered address in the target and control area as well as those who have moved to other parts of the municipality or elsewhere in Denmark will be present in the dataset.

Substudies

The overall study consists of four substudies (table 1).

Substudy I, 2018–2021: this substudy focuses on monitoring level and development in health, well-being and social relations across the study period within the study area at both individual and aggregated levels across time. We will compare survey responses in our study on questions on health, well-being and social relations at the three waves 2018, 2019 and 2020 to the Health Profiles of the entire municipality in 2017 and 2021 for potential differences cross-sectionally and over time.

Substudy II, 2015–2025: a 'natural experiment' study comparing individual and aggregated level differences in register-based information on health and social variables across time including the entire study period and until 2025. The included population includes all residents with an address in our study area and the control area at any point during the years 2018–2020 (~3000 residents in each area). Hereby we plan to study if the structural changes (the structural intervention, the 'natural experiment') give rise to differences in health and social factors compared with the control area.

Substudy III 2018: a qualitative study based on in-depth semi-structured interviews with approximately 30 residents representing the two largest ethnic groups in the neighbourhood (Danish- or Turkish born) recruited in a maximum variation process and through snowballing.[32] Themes related to health, well-being and social relations are explored and will feed into the results emerging from the survey as well as into the development of interventions (figure 1). Interviews will be conducted in the home of the participants or in other locations in the area (our local office, local clubs, associations and so on) depending on the preference of each participant, and professional interpreters will be involved when needed.

Substudy IV 2019–2021: two interventions will be developed based on a combination of survey and qualitative findings feeding into a community-based participatory process. Open meetings for residents in the area will be arranged using a combination of brief presentations of preliminary findings, engagement of residents facilitated through processes inspired by design thinking and using graphic illustrative tools such as drawings based on resident perspectives. Care will be taken to engage residents representing the diversity of the area in terms of ethnicity and gender. Interventions will be implemented and evaluated for process and short-term outcomes using observations and preintervention and postintervention assessments of relevant outcomes pertaining to health, well-being and social relations. Overall, the two co-created interventions build on principles of community-based, participatory and diversity-sensitivity methods with the overall aim of contributing to improved health, well-being and social relations in the context of large-scale structural changes of the area.

Primary outcome measures

The study is aiming at analysing the potential consequences for health, well-being and social relations of a large structural intervention described above. We include validated survey measures such as, for example: (1) WHO-5 a short self-reported measure of current mental well-being, judged to have adequate validity in screening for depression,[33] (2) Short-Form 12 (SF-12) V.2 for measuring health-related quality of life. The instrument contains eight subscales as the original 36-item questionnaire: physical functioning (PF, 2 items), role limitations due to physical problems (RP, 2 items), bodily pain (BP, 1 item), general health perceptions (GH, 1 item),
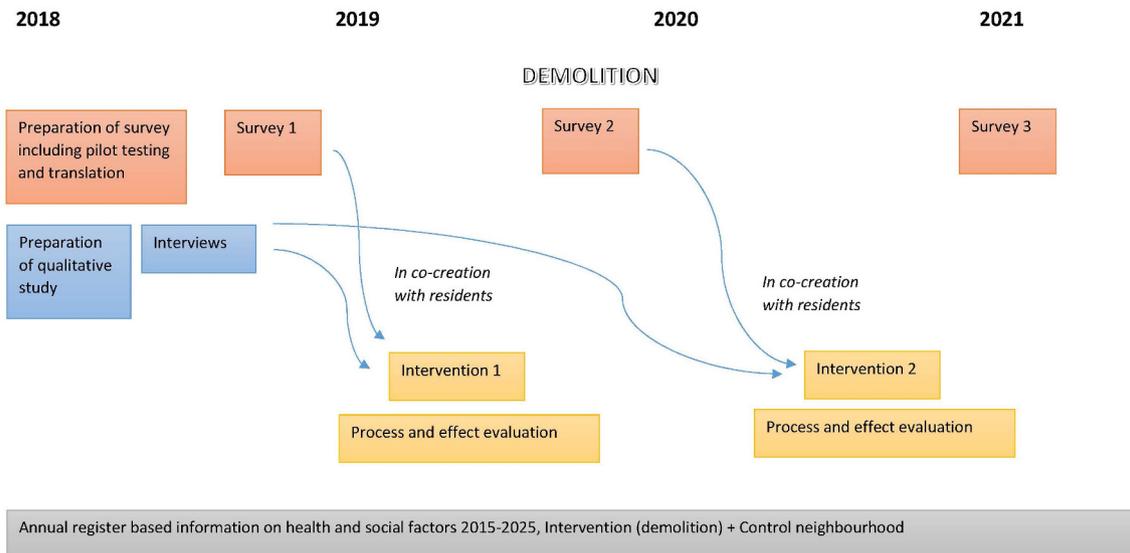
Figure 1 Data collection and interventions.

vitality (VT, 1 item), social functioning (SF, 1 item), role limitations due to emotional problems (RE, 2 items) and mental health (MH, 2 items). The psychometric properties and factor structure of the SF-12 have been examined in several studies worldwide. Overall results have indicated that the instrument is a reliable and valid measure that can be used in a variety of population groups.[34] (3) Copenhagen Social Relations Questionnaire a validated instrument to estimate the structure and function of social relations in adult populations with relatives, friends and neighbours.[35] Furthermore, change in the use of healthcare services and social services across time will be included as register-based outcome measures.

Statistical analysis plan

Descriptive statistics will be reported on cross-sectional distributions of survey information on health, well-being and social relations. Multivariate logistic, linear and Cox regression analysis will be employed to analyse differences in health and well-being between the study area and the entire municipality cross-sectionally, and across time based on survey and register-based information.

Often an intervention is applied in an area (eg, community and municipality) without it being an experiment and without a control group, this can be categorised as a natural experiment (in this case the large structural changes). Such a situation offers the opportunity to exploit exposure contrasts between areas regarding the specific intervention for evaluation. It demands comparable outcome measures in the chosen areas. This can often be designed as a number of consecutive cross-sectional measurements in the two areas before and after the intervention. Non-randomised design methods offer the potential to evaluate the effects of interventions in situations where randomization is not an option. In the present study, we will employ the difference in difference approach and propensity score matching to evaluate the natural experiment (the structural intervention)

comparing measures of health and social factors retrieved from registers in the two social housing areas before and after the intervention.

Natural experiments are defined by a clearly identified intervention, although details of compliance, dose received and so on may be unclear. In our case, some residents may move from the target area (the intervention) to the control area during the study period. Hereby, the assignment is not under the control of the research team; knowledge of the assignment process enables confounding due to selective exposure to be addressed. Confounding is likely due to selective exposure to the intervention and must be addressed by a combination of design and analysis. We intend to follow the latest recommendations on statistical analyses in this area as suggested by, for example, Craig *et al*[36]

Qualitative analysis plan

Interviews from substudies III and IV will be transcribed verbatim and analysed by applying a strategy of systematic text condensation.[37] Data will be coded into meaningful units and summarised into main themes exploring in depth the experiences of residents awaiting structural neighbourhood changes, and motivations and perceived effects of participating in the co-created interventions respectively. Field notes and participant observation are used to contextualise findings as well as to qualify the process evaluation of the interventions. Mechanisms by which neighbourhood demolition involving large-scale resident clearance and relocation may differentially impact on health, well-being and social relations will be identified.

Ethics and dissemination

The protocol for the study was developed in a collaborative process with local stakeholders including municipal, non-governmental and housing association representations, and it was approved by the locally elected board

of residents. The study is registered in the University of Copenhagen's record of biobanks and research projects containing personal data (J.nr: 514-0183/18-3000) and will be conducted in accordance with the principles of the Helsinki Declaration. Informed consent will be given by all participants before participating in the study. Care will be taken to ensure adequate participation of a range of stakeholders, particularly residents and locally situated municipal employees and non-governmental organisation, in the execution of the study and in ongoing presentations of preliminary data in order to ensure engagement, inclusion of diverse perspectives and the usefulness of survey instruments/interventions developed for the study. Also, participatory approaches will enhance the reflexive interpretation of data and transfer of implications into practice. Engagement and interactions in the neighbourhood are furthermore important to ensure trust and access, as more deprived/diverse neighbourhoods are a highly discussed topic in Danish politics and media, making stigmatisation and othering processes important factors to deal with in research.

Results will be published in international peer-reviewed scientific journals and presented at conferences, seminars and as short reports. In addition, ongoing dissemination to residents and stakeholders, in writing, orally and through visual methods, is a key element in the study.

The proposed study is relevant for policies and practices focusing on deprived social housing areas and the effects of large-scale, often expensive and comprehensive structural changes from the perspective of residents in these communities. By combining insights from three waves of surveys conducted in multiple languages by a trained team of bilingual interviewers and the Health Profiles from the study Municipality; linkage to the valid and comprehensive Danish registries including information from the study area and a carefully chosen control area on health, healthcare utilisation and social characteristics across potentially >50 years; qualitative interviews and observations through long-term fieldwork and presence in the community; and by embedding co-created interventions during the project period, it will provide new multifaceted knowledge of relevance to both the specific area and for other similar regions in and outside Denmark.

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