POLICIES, HEALTH PLANS AND INTERVENTIONS TO ADDRESS SOCIAL INEQUALITIES IN HEALTH IN EUROPE: A QUALITATIVE PERSPECTIVE

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Dedicated to my grandmothers; Eleanor and Rosalia.

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Abstract

Cities are densely populated and offer a diversity of cultural backgrounds, religions, ethnicity and customs, frequently divided by socio-economic demarcations. Inequalities in early child development within cities are of great concern. The objective of this dissertation is to describe policies, health plans and interventions to address social inequalities in health and early child development in European countries during 2010-2013. This thesis was carried out using qualitative research methods and a systematic review. Findings suggest the importance of placing more effort on providing policymakers with available information on health and its social determinants. It is necessary to ensure that health inequality aims are included in the political agenda. These should take into account the multidisciplinary and multisectoral nature of tackling health inequalities. Providing access to a comprehensive range of quality universally proportionate services during children's early years is important.

Resumen

Las ciudades están densamente pobladas y ofrecen una diversidad cultural, religiosa, étnica, y de costumbres. Suele estar dividida por demarcaciones socioeconómicas. Las desigualdades en el desarrollo infantil temprano son de gran preocupación. El objetivo de esta disertación es describir políticas, planes de salud e intervenciones para abordar las desigualdades sociales en salud y desarrollo temprano infantil en países europeos durante 2010-2013. La tesis se llevó a cabo utilizando métodos de investigación cualitativa y una revisión sistemática. Los resultados sugieren la importancia de poner más esfuerzos en proveer a los responsables de políticas con información necesaria de salud y sus determinantes sociales. Es necesario asegurar que los objetivos de las desigualdades en salud sean incluidos en la agenda política. Estos deberían tener en cuenta la naturaleza multidisciplinaria y multisectorial de reducir las desigualdades en salud. Proveer el acceso a un abanico amplio de servicios universalmente proporcionales durante la edad temprana de calidad, es importante.

Preface

Health equity - which is unequally distributed between and within societies (1) - was established as a core value of the World Health Organisation's (WHO) Healthy Cities network over 30 years ago. Since then, many city governments have adopted this principle and carried out actions to tackle health inequalities and promote the wellbeing and development of cities and their residents (2). Health inequalities are caused by different life experiences such as area of residence, socioeconomic position and gender, adverse circumstances and context, policies and service provision, among others. These factors shape and are shaped in turn by settings in which people live, work, and age (1). Research has focused increasingly on understanding health inequalities in urban areas and how these may be addressed. Policy and decision makers together with those responsible for putting policy into practice have also shown interest and allocated resources due to globally increasing urban growth (3).

Early Child Development (ECD) is a major driver of equity in health. Children born to nurturing and supportive environments will have the ability to thrive and lead healthy lives to their fullest potential. Therefore, action to reduce health inequalities needs to start during gestation and carried out during the lifecourse (1). This may be effected by providing a portfolio of evidence-based interventions and delivery systems across the social gradient (4). Adversity at this stage in life has a negative

effect on the different domains of ECD -cognitive, communication and language, social and emotional skills during later childhood and during later stages in life (5).

Initiatives carried out upon these areas in cities and other levels of government potentially have an effect on health inequalities. We focused on a qualitative approach towards identifying these to gain in-depth knowledge. The findings provided in our conclusions and recommendations may serve as examples of good practice in addressing health inequalities. The general objective of this dissertation is to describe policies, health plans and interventions to address social inequalities in health in European countries during the years 2010-2013.

This thesis brings together five studies focusing on programmes and services to reduce health inequities in urban areas and early child development. Studies I, II, III and IV formed part of the INEQ-Cities European project lead by Dr Carme Borrell (6). Study V was included in the Drivers project (7), led by EuroHealthNet. The five scientific articles have been published in peer review journals. The INEQ-Cities project aimed to describe socio-economic inequalities in health and mortality and policies to reduce these in European cities during 2009-2012. Partially financed by the Executive Agency for Health and Consumers, the project was co-ordinated by the *Agència de Salut Pública de Barcelona* and comprised a network of 18 research centres across 14 European countries. The project was made up of two main components: an analysis

of mortality inequalities in small areas in 16 European cities and an exploratory description of policies and interventions delivered to address health inequalities in participant cities. The second component included qualitative research analysis of policies and interventions and a scoping review of these. DRIVERS for Health Equity, a three-year research project funded by the European Union 7th Framework Programme assessed the impact of policies and programmes on three of the key drivers to reduce health inequities: ECD, fair employment and income and social protection and provided policy recommendations.

I, the doctoral candidate was INEQ-Cities' project manager and formed part of the team leading the work package on programmes and policies to reduce health inequalities in cities. I contributed towards developing the research protocols for studies I, II and III. Within DRIVERS, I was part of the team leading the work package on ECD and liaised with third parties across Europe to carry out the DRIVERS case studies provided in Annex I.

Index

1. INTRODUCTION

1.1 Health inequalities

A substantial amount of research has focused on how health inequalities are shaped by social and economic determinants. Research has also drawn attention to producing evidence on how to address social determinants of health. Inequalities in health were defined by Margaret Whitehead as ‘systematic and avoidable differences among social, ethnic, and geographic groups in the population (8). In her description of health inequalities she explained that many of these differences were ‘unjust and unfair’ (9).

Accordingly, once the concept of health inequalities was more widely used, strategies to reduce these became a matter of concern. In order to achieve this aim it became clear that action needed to be carried out at different levels of government (8). This helped shape and define strategies to reduce health inequalities. The WHO stated a commitment to Health For All (HFA) and within it, equity needed to have a central role. This was an important step as it recognised the right for all human beings the opportunity to develop their full health potential (10).

To understand what defines health and health inequalities it is important to take into account that the Social Determinants of Health (SDH) are social factors that shape population health inequities (1). The Commission on Social Determinants of

Health concluded that social inequalities in health arise because of ‘inequalities in the conditions of daily life’ and the determining factors which influence these: inequities in power, money and resources (1). How society is organised will influence capacities to lead a fulfilling life and to enjoy good health. Their approach to health inequalities described the following areas as major drivers of inequality: the conditions of early childhood, development and schooling, the nature of employment and working conditions, the physical form of the built environment and the quality of the natural environment in which people reside. These factors combined will determine people’s level of health (1).

In ‘Fair Society, Healthy Lives’ (11), Michael Marmot and his team, further explained that there is a very close relationship between the social and economic characteristics of society and the distribution of health as a social gradient among the population. The framework for action included is based around policy recommendations to reduce health inequalities by creating the conditions for people to take control over their own lives. The framework presents the concept of health inequalities from the life course perspective where disadvantage starts before birth and accumulates throughout life (11).

Wilkinson and Pickett explained in the book titled ‘The Spirit Level’ that economic growth and increases in income exclusively have ceased to contribute to wellbeing in high-

income countries, even though health and social problems are still strongly associated with income. In their book the prevalence of some of the principle health and social problems such as: level of trust, mental illness, life expectancy and infant mortality, obesity and children's educational attainment, were related to levels of inequality (12).

1.2 Health inequalities urban areas

a) Characteristics of urban areas

Cities have several traits and characteristics which distinguish them from other types of settlements such as villages or towns. Cities are densely populated and offer a diversity of cultural backgrounds, religions, ethnicity and customs. Cities also count with a wide range of collective resources such as community groups and organisations and a provision of services which include health care, education, or social services (13-15). Urban areas offer their inhabitants the potential to share common spaces and to participate in public and private events. In these spaces residents cultivate societal values, define modes of governance and establish multiple types of relations with others (16).

The characteristics of urban areas and the dynamics that take place within society play an important role shaping the health of its population. The distinctive traits of urban areas should be taken into account when planning and delivering services and programmes or implementing public policies (17). Many of the

fastest growing cities in the world are relatively small urban settlements (18). At present, more than 54 per cent of the world's population lives in urban areas. It is estimated that this percentage may increase to 66 per cent by 2050. In Europe, these percentages are even higher, in 2014 three quarters of the population lived in urban settlements (15, 19). Cities are well placed to deal in many ways with pervasive problems and the new post crisis challenges. Cities need adequate support from other levels of government. By establishing collaboration with these, cities can contribute towards reducing inequalities. City governments can promote the development of collaborative agendas and strategies for local responses to social health inequalities (20). Cities can provide spaces for interrelation and participation however, they can also be areas of exclusion and marginalisation as they are constantly changing and can generate residential differentiation and segregation (16).

b) Inequalities and health within cities

Cities are frequently divided by borders which may appear invisible or macroscopically evident depending on the country and urban policies in place. These demarcations are artificial, constructed by human beings and reflect among other factors, differences experienced by their respective populations in terms of socio-economic factors (16). Understanding the SDH in cities and how these may be addressed is very important as the majority of the world’s population lives in urban settlements

(15, 21-23) and social inequalities in health are greater in urban areas than in rural settings (3, 24). Within cities, health inequalities and the burden of disease are higher in deprived neighbourhoods and the less serviced peripheries (25, 26). These affect individuals who live within these areas or neighbourhoods more as each of the risk factors is likely to be distributed unequally across communities (27-29). Examining the role of neighbourhood risk factors is important as the risk of poor general health is higher in neighbourhoods which are less privileged (30).

Area-level socio economic status varies depending on the surrounding community or neighbourhood and also determines health through individual and contextual pathways. There are different neighbourhood level indexes which can be used to measure deprivation at the contextual level. Some examples are the Community Vitality Index (31), the Index of Multiple Deprivation (IMD) or the Townsend Index (32). These take several different contextual domains into account such as neighbourhood income (28), race and education (33), unemployment, social welfare (34) violence (35, 36) within the areas, training deprivation, barriers to housing and services (29, 37, 38). Residential areas have emerged more and more as potentially important contributors to inequalities in health (39).

1.3 The role of city governments in reducing health inequalities

Socioeconomic inequalities in health and building healthy public policy have been an object of study since the 1980s (40). The first international conference on health promotion was held in Ottawa in 1986 and the Charter for health promotion was launched. It incorporated five key action areas in Health Promotion (41). In the European context, the WHO Region developed its own targets for the HFA strategy in 1985, with Target 1 of the 38 targets focusing on the reduction of inequalities in health (40).

At the city level, municipal governments have authority over a diversity of social determinants of health inequalities (42). These have competences to promote health equity and take action toward reducing health inequalities by developing healthy public policies in some of the following areas: e.g. employment, housing, income, food security, social supports (15, 22, 24). These may be reinforced by offering a wide service provision coupled with programme delivery (11, 43-46).

City governments' competences and authorities vary according to country or region, however healthy public policies can be developed across sectors which allows addressing urban inequities (18, 47). Governments in urban areas are connected with those in other political levels such as

metropolitan areas, regions or countries. Stakeholders within the private sector, the civil society and community groups play important roles in shaping city governance (15, 17).

Improving living conditions in urban areas is central to improving the health of urban populations and reducing inequalities (15). City governments may address socio economic inequalities in health by redistributing income collected through taxes within the city and providing cash transfers. Other aspects over which it may have competences are safety and security and fostering community participation (2). Initiatives may also be carried out in settings such as neighbourhoods, schools and workplaces and by providing access to safe public spaces in neighbourhoods to carry out physical activity or to sport facilities (15).

Healthy environments at home, work and play are one of the five features of local areas that might influence health as suggested by Macintyre (48). Neighbourhoods and health may be influenced by the role of residential segregation. Policies addressing residential segregation and poor housing can reduce inequalities by offering income distributions and affordable housing (49). Housing quality, informal settlements or overcrowding are also factors to be addressed (39). Another aspect of the physical environment is transport mobility, affecting the capacity to walk and use public or private transport. The natural context, the built environment and transport can influence environmental characteristics. The

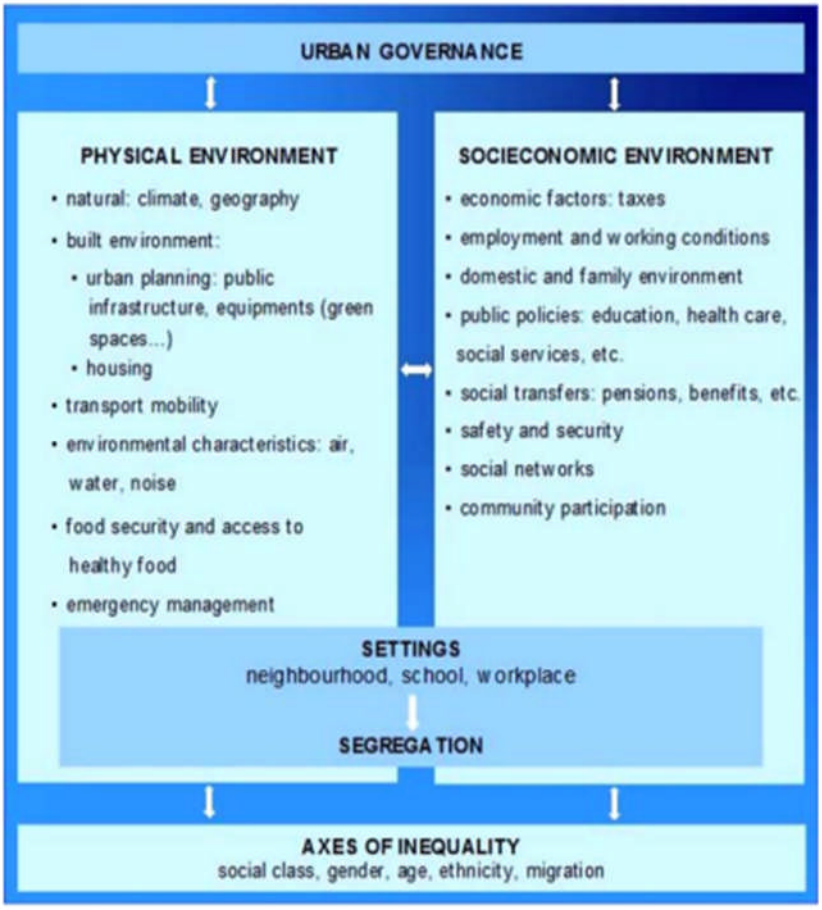
quality of air, water and noise pollution are important determinants of health in urban areas. Food security and access to healthy food determined by their physical availability and price are also central issues (18, 50).

The conceptual framework developed within the INEQ-Cities project below included the factors and processes influencing health equity in cities (15). It shows that urban governance is key to promoting health equity in cities. Urban healthy governance overarches the physical environment and socioeconomic environment as major drivers for healthy cities. These include many different scenarios which help to promote healthy environments. An inclusive healthy governance is important to address the SDH as causes of health inequities in cities and all government levels. This entails establishing collaboration across all the sectors which are determinants of health inequalities and implementing healthy public policies in a joint effort. For it to be effective it needs to be carried out at different levels of government and to be as participative as possible by including the different stakeholders involved (2). Community organisations also need to be involved as it has been described elsewhere that this is a key step in addressing health inequities (3). These and the non-profit sector play fundamental roles in advocacy for health equity in countries within and outside Europe (51, 52).

Also central to the framework are settings such as school, home or workplace where cities' inhabitants carry out their

daily lives, interrelate and establish bonds. Axis of inequality are a cross cutting concept which have an effect on health inequalities in cities in combination with the other areas.

Figure 1. Factors influencing health inequalities in urban areas



Source: Borrell et al 'Factors and processes influencing health inequalities in urban areas' (15)

a) Addressing the wider socioeconomic determinants of health within cities

A ‘health impact pyramid’ developed by Frieden (53) described the impact of different types of interventions on population health. The interventions in its base are those which evidence has shown to have the greatest potential impact in reducing health inequalities. These interventions or policies address the socioeconomic determinants of health. There are several levels or layers working up to the top of the pyramid which includes examples of interventions such as education and counselling. Interventions focusing on the lower levels of the pyramid tend to be more effective because they reach broader segments of society and require less individual effort.

Evidence has shown that interventions in the highest levels of the pyramid are less effective in reducing health inequalities. These have been described as requiring less political commitment than more complex and structural policies and seldom find opposing forces within the government or other stakeholders (53). The WHO European healthy cities network consists of more than 100 cities and towns from 30 countries across the European region. They are linked through many networks and this provides different levels of support. It allows sharing resources and experience in health and act as a platform for health advocacy. Among its strategic goals are promoting action to include in the political agenda and to

promote policies and action for health at the local level emphasising addressing the wider determinants of health equity (54).

1.4 The role of policymakers in cities

Action on health inequities and their determinants may be influenced by how these are perceived among agents with capacities and competences to implement and manage actions to address the SDH across the gradient (3). As described above, cities are important sites for interventions aimed at health inequities (18). With dominant roles in economic, political and social life cities remain critical to setting populations on a more inclusive, equal and sustainable course (20).

Policy makers are crucial in decision making regarding very relevant issues. These relate to governance, socioeconomic determinants and other factors within the physical environment such as transportation, safety and urban planning. They are involved in decision making processes regarding the distribution of space and land in urban areas and allocation of resources to health care centres, schools, social service centres and equipment among many other issues. They are also involved in how programmes are delivered and implemented and in which areas. Policymakers are in charge

of managing service provision with often restricted budgets. The nature of their decisions will vary according to the setting in which they work whether it is a supra national institution such as the EU, a national government or a city one. The role and position the hold also determines their decision and policymaking processes. Whether they are officers, elected politicians, analysts or advisors (55).

To better understand the process and dynamics of policymaking in cities it is crucial to gain deeper knowledge on how new research findings are included in policy agendas (56). To comprehend how decision making operates regarding promoting health equity in cities, understanding to which extent the SDH are taken into account and how agents conceptualise health and health inequalities is needed (57).

Policymakers are key in deciding how priorities are set in the agenda of city governments (58) and they are central in policy and decision making described elsewhere as non-linear and fast paced (57). As policymakers are responsible for policy in the form of laws, guidelines, and regulations (59), their knowledge, beliefs and perceptions are relevant in the implementation of these (60, 61). These may be shaped by the information on health issues and equity they may have access to. Information is usually provided in a report or survey format (62, 63). A key challenge that policymakers and those supporting them must face is the need to understand whether

research evidence can be applied to their setting (64). Decision makers' views regarding responsibilities and priorities of city governments also play an important role in policies implemented in urban areas (3, 24). These issues will influence decision making and affect how health inequalities are addressed by city governments (56, 65, 66).

1.5 Policies to reduce health inequalities in cities

Public policies on health can have strong effects on the population living in urban areas and in other levels of governments. Contextual factors are very important in shaping policy and must be taken into account by policy makers (64). Action against inequalities in health may have different approaches: a) targeting disadvantaged population groups; b) narrowing the health gap, focusing on the extremes of the social scale; and c) reducing health inequalities across the entire population. This last approach focuses on all urban residents within a city and across all social classes (67). It aims to reduce health inequalities across the social gradient (11, 68, 69). Local public policy to reduce health inequalities should focus on improving the physical and socioeconomic environment not only in deprived areas, but throughout the entire city.

In Europe, social inequalities in health have been included in the political agenda during the past decades in many countries, but the progress of governments towards policy to reduce health inequalities differs by country. In some countries, the presence of health inequalities is barely taken into account, while in others there are various actions across sectors to address these. Health policies may be explicit in public documents, health plans, or health policy documents which for a given period, describe a set of principles, values, objectives, strategies, and interventions to be implemented (24, 70). As health inequalities in urban environments are complex (15, 71) and affect the entire population across the social gradient in health (21) these require a multisectoral approach to address the multiple social and economic determinants in place (3).

1.6 Translating research evidence to policy in cities

The need to summon researchers, policy-makers and health care providers to collaborate in efforts to bridge gaps in knowledge has increasingly been taken into account by establishing dialogues between the stakeholders involved. These efforts bring together scientific evidence by collating and interpreting it for the purpose of informing policy development. By providing fora for researchers and policymakers to interact, more efforts can be made towards improving and identifying

evidence on high-priority policy issues in a timely manner (64, 72, 73).

Area-based studies have identified geographical patterns of health inequalities and their contextual socioeconomic determinants (17). Municipal governments must plan and deliver intersectoral policies and programmes that promote health equity and provide healthy spaces (74). The persistence of health inequalities and insufficient actions point towards a possible gap between academic research and decision makers. There may well still be a mismatch between the evidence produced on effective programmes to reduce health inequalities and their implementation (75). Barriers to reduce health inequalities have been well documented. Some of these are related to conceptual challenges in translating knowledge which may be considered complex by non-academic audiences (3, 47).

There is an ongoing debate on how evidence is used in policymaking and how research responds to the policymaking process. Research has been described as more linear than policymaking and knowledge translation between the two meets many challenges and does not always achieve its aims. Understanding these processes and barriers to collaborative working are important (56). There is a need to promote inter-disciplinary research that combines findings with a search for mechanisms at the different levels of government (76).

The economic crisis and austerity measures carried out by many governments may also act as a barrier to collaborative work (77). More and more, rresearchers see the need to provide evidence that can inform policy and include policy implications and recommendations in their work (78). However there are still some barriers to overcome. These relate to context, relationships between researchers, policy makers, and stakeholders, research that is not timely, or worded appropriately (79).This may have an effect at the municipal and other levels of government (26, 42, 78). Understanding and pinpointing the causes of the divide described as “know-do gaps” are becoming increasingly important in order to tackle health inequities. This concern now also shapes knowledge translation frameworks and agendas (80).

1.7 Early Child Development and health in urban areas

Within urban populations increasingly growing in numbers, children are among the most vulnerable and are among the more aggrieved by inequalities in health. Inequalities in experiences and access to healthy environments not only affect their wellbeing but also determine their development during the early years and subsequent growth in later stages

of life. During child development, neuron connections produce cognitive, motor, emotional, behavioural and social skills (81).

Childhood risks associated with poverty or similar adverse conditions, such as lack of stimulation or excessive stress affect development beginning prenatally by influencing the foetal brain through exogenous factors that produce maternal stress (82). ECD will influence many aspects of wellbeing, health, competence in literacy and numeracy, criminality and social and economic participation throughout the life course (83). The early acquisition of skills is part of a developmental continuum and commences well before formal schooling (84). By the time the child enters school, development has already been influenced by family, neighbourhood and the broader societal level (85).

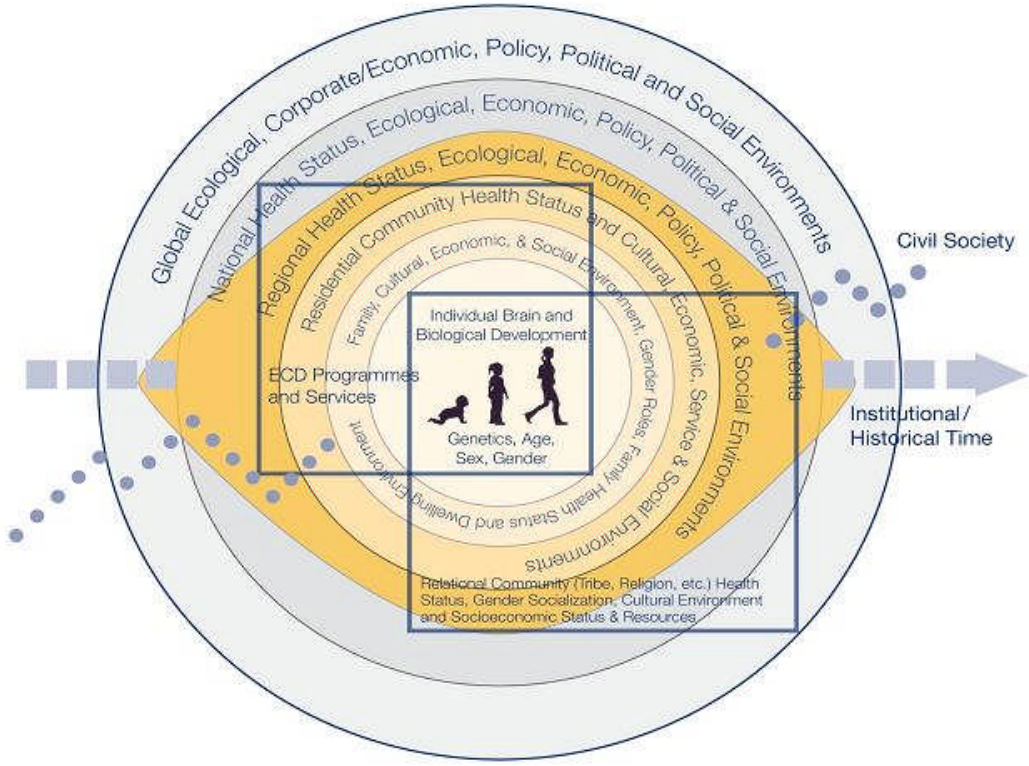
At the individual level, family SES is associated with a multitude of development outcomes. (86) It has been described that children of mothers with mental health problems were more likely to have negative behavioural, emotional, and peer outcomes (87). Low family SES also produces obesity in childhood and adolescence and may exert a strong influence on socioeconomic status (88). Children from disadvantaged groups are less likely to achieve a good level of development and have worse health outcomes (1).

a) Early child development conceptual framework

The overarching framework of the ECD component of the thesis is the Commission of the Social Determinants of Health's Total Environment Assessment Model of Early Child Development, developed as a means of framing the types of environments that are integral to healthy ECD and linking these to the processes that shape children's outcomes (89).

In the framework, the spheres are described as interacting and interdependent and influence development during early childhood. These include the individual, family, residential and relational communities, ECD programmes and services, and regional national and global environments (89). The development and health of the individual will be affected by the spheres described in the framework. The family is the primary influence during a child's development. A key requirement of healthy ECD is a secure relationship with a primary care giver (87, 90).

Figure 2. Early child development spheres of influence



Source: Irwin LG et al. 'Early child development: A powerful equalizer' (89).

The association between socioeconomic status and family has been widely studied (91, 92) and evidence shows that it is one of the strongest explanations for the differences in outcomes in ECD and wellbeing (93). Many families that face daily challenges due to their socioeconomic circumstances are able to create the necessary nurturing environments for their children (94-96). Resilience is the capacity of children to thrive in adverse circumstances (97). Families provide the most

important relationships and nurturing environments for enhancing children's resilience. Gender inequalities also have an impact on families and children (83, 89, 98).

The family dwelling and the conditions in which families reside play an important role in children's well-being and development. Housing conditions have been described to have an impact on mental and physical health, overcrowding, indoor air quality, dampness and cold are linked to children's development (99-101). Families need support in order to offer the best possible conditions for their children's healthy development (102-104). Social protection policies, access to appropriate services and sufficient income help their ability to provide a protective environment in which to foster children´s resilience (105-107).

The socioeconomic environment of residential areas also play an important role in ECD (108). Neighbourhood deprivation and the physical context influences development during the early years (109, 110). Children from family backgrounds that pose multiple threats to their development tend to do better growing up in mixed socioeconomic neighbourhoods (95). There is a clear association between SES of a community and the exposure its residents will have to hazardous factors such as higher criminality (111), crowding, poor housing, excessive noise, air and water pollutants and lack of physical space accessible to children and their families to create a space for physical activities and playing with other children (48, 112). It

reduces the opportunity for play-based learning and exploration which as described above is critical for ECD (35, 113-116).

1.8 ECD and the social gradient from a lifecourse perspective

The different qualities of experience create social gradients in human developmental trajectories across the life course (91, 93, 96, 117). As described elsewhere, children from the 1970 British birth cohort survey assessed by tests of intellectual, emotional and personal development who were in the bottom SES quartile at 22 months were still there at age 10. High-SES children showed considerably more upward mobility and were more likely to be in the top quartile by age 10, even if they were in the bottom quartile at 22 months (118).

Evidence from intervention studies suggest that performance in domains of child development can be modified in ways which improve health, well-being, and competence in the long-term (86). By providing a positive start across the social gradient, children will benefit from improved developmental outcomes during later childhood and throughout their life course as significant improvements in all domains of child development will influence later school achievement (85, 119).

Relative poverty in childhood strongly influences health and other outcomes throughout life and remains high in much of

the Region. In the countries in the eastern part of the Region, despite 10–15 years of economic growth before the current recession, child poverty has been more or less at the same level (120). The conceptual framework developed by Marmot and colleagues shows that disadvantage starts before birth and accumulates throughout life (11). Therefore, action to reduce health inequalities must start before birth and carried out through the life of the child and into adulthood by ensuring social justice, health and sustainability are present across all policies and addressing health inequalities across the government, not just the health sector. This may be made effective by delivering evidence-based interventions and delivery systems (43).

1.9 The role of city governments and promoting equity throughout the life course focusing on early child development

Children in urban areas are more likely to survive infancy and enjoy better health and have more educational opportunities than children in rural areas. This has been defined as the urban advantage. However, inequalities within cities are of great concern (16, 18, 121). A review focusing on interventions and programmes to reduce health inequalities in urban areas showed that six of the ten interventions promoting healthy settings targeted children. It argued that some important universal policies with great potential effect on health

inequalities across the life-course, implemented on a national level, may be overlooked when focusing on the urban level (23).

Funding for early years service provision proceeds from the government's regular budgets. Recent trends to decentralise social services to local government levels in most countries, shifts responsibilities for financing of ECD programs to sub-national or local levels. Most national governments share the cost of early childhood interventions with sub-national governments and program beneficiaries (122). Local governments in collaboration with regional and national governments and with the support of international agencies and civil society partners are key players in developing, promoting and funding ECD programmes and services which will influence children´s outcomes throughout the lifecourse (11, 43, 123). An example of how city governments can implement policies to reduce inequalities during the early years can be found in urban planning. Low SES children living in mixed neighbourhoods tend to better than those living in disadvantaged ones (83). Putting policies in place to address residential segregation within cities should be taken into account when developing urban planning that increases large socio-economic differences.

At different contextual levels within cities, health status is related to SES across the socioeconomic gradient. Children

who live in disadvantaged areas within low income families have worse health than those living in areas which are better off (37, 101, 112, 124-128). Cities and residential factors affect children's health either directly or indirectly through different mechanisms such as environmental factors, health behaviours, psychological exposures, stress, and access to health care (108, 124).

Levels of deprivation may also influence ECD causing social disintegration due to high crime rates, unsafety and unemployment (111, 129, 130). Stafford et al suggest a collective resources model to explain the effect of socioeconomic factors on health. It describes that families in disadvantaged areas have worse health than those living in less deprived areas due to differences in material and social resources (131).

Fear of crime in disadvantaged or peripheries within the urban landscape is associated with poorer mental health and greater limitations in physical functioning. Participation in vigorous physical activities, contact with friends, and involvement in a variety of social activities were lower among those with greater fear of crime, especially in cities (132).

1.10 Early years programmes in other levels of government

Studies which have shown the importance of parenting activities across income groups and the social gradient (96)

fostered through ECD programmes are not limited to cognitive gains, but also include physical, social, and emotional gains, all of which are determinants of health over the life course (83). Parenting programmes offer valuable opportunities to positively influence child health and well-being through health-promoting environments, establishing good health behaviours, providing support for families and creating resilience (97).

Examples of early years programmes delivered outside Europe have been well documented: “The Perry Preschool Project” delivered during 1962–1967 and the “High/Scope Preschool Curriculum Study” (1967–1970) which showed positive outcomes for test scores, high school completion, lower arrests and criminality, teenage pregnancies and higher home ownerships. The “Carolina Abecedarian Project” (1972–1985) and the “Syracuse Family Development Research Program” (1969–1975) had an impact on improving development and IQ scores (133, 134).

The economic return to these programs is high, especially when considering alternative policies that target children from disadvantaged environments or the policies targeting the young adults who emerge from them (135). There is sufficient scientific rationale for early intervention (136), as social inequalities develop before birth it is more effective to deliver interventions not only in the early stages of the child’s life (4), but also before birth and has been established as a priority at the UN Convention on the Rights of the Child (121).

1.11 Justification

This thesis was carried out using qualitative research methods and a systematic review. The use of rigorous qualitative research methods has been on the rise in health services and health policy research (137) to explore the experiences of participants and the meanings they attribute to them, to contribute new knowledge and to provide new perspectives (138). It is consistent with developments in the social and policy sciences at large and has been described to reflect the need for more in-depth understanding of naturalistic settings the importance of understanding context and the complexity of implementing social change (139).

Social health inequalities have been widely documented throughout Europe. Most studies compare social inequalities in health within or among countries-usually with a quantitative approach-but do not focus on cities or urban populations (140-144). Knowledge regarding how policymakers from local levels of government perceive the subject is still scarce (57, 145) and the few relevant studies in this field have been carried out outside Europe (58, 146, 147). To understand the policymaking process in municipal governments, it is important to comprehensively capture the beliefs and perceptions of decision makers.

The majority of studies describing knowledge on the nature of health inequalities have explored lay perceptions (112, 148-151), and the fewer studies describing expert's views were focused on researchers and policymakers working in regional and national governments (152, 153). Public policies on health may influence and determine many aspects of the population living in urban areas. Health policies are shaped by and taken into account by policy makers. Health policies are explicit in public documents, health plans, or health policy documents.

Many reviews (154) (155, 156) have compared national policies on health inequalities. To our knowledge, no studies have compared policy documents about reducing health inequalities in urban areas, looking at city health plans. Selecting policymakers and policy plans from different European cities provided a description of the different socio-political realities and contexts according to the participant's daily experiences to provider a richer and wider view on reducing health inequalities at the municipal level throughout the continent. Notwithstanding their diversity, the participant cities share important commonalities as European democracies and urban settings, allowing to explore the study object from a new view for studies I, II, III and IV.

To our knowledge, there are few scientific reviews of interventions to tackle health and developmental inequalities in early child development, focusing only on European studies. Previous evidence for this comes mainly from a small number

of European countries and from outside of Europe and little was known about the extent to which social inequalities in childhood health and development differ in scale across Europe, how the mechanisms that explain these inequalities operate in different contexts, or the impact that programmes and policies that aim to address social inequalities in early childhood have in different European contexts(134, 135) As described by Geddes and colleagues, caution is needed when generalising to other contexts and to areas or continents where inequalities are less pronounced (133).

The WHO European Region includes countries with close to the best health and narrowest health gaps in comparison to other continents and has benefited from a sustained period of social cohesion, developed welfare states and high-quality education and health services (120). However inequalities still remain and are increasing in some countries, therefore the different set of conditions across Europe offers the possibility of evaluating evidence on the effectiveness of early interventions on families' socio-economic conditions as well the physical functioning and development of children in the early stages of their lives.

A combination of a systematic review and qualitative research was carried out to generate further evidence and knowledge. This enabled to identify relevant gaps in knowledge and research, to develop recommendations on how to improve and advance research. Systematic reviews summarise the

evidence from studies conducted in a variety of settings with different study designs. Insights can be drawn from systematic reviews about the effectiveness of intervention studies and approaches to implementation, monitoring and evaluation (157). These help provide policymakers with a synthesis of information on effectives and guide them to what works, for whom in which context.

2. OBJECTIVES

The general objective of this dissertation is to describe policies, health plans and interventions to address social inequalities in health in European countries during the years 2010-2013.

The specific aims of the studies 1-4 are:

Study 1

To describe the perceptions, knowledge and beliefs of public policymakers on social inequalities in health and policies to reduce them in Barcelona and thirteen European cities during 2010 and 2011. Objective number 1 has two corresponding published articles.

Study 2

To describe and analyse good practices and main challenges for local interventions on inequalities in health through the narratives of European city managers in charge of their implementation.

Study 3

To analyse health policy documents from six European cities and one county council published around the year 2010 to determine (i) how cities conceptualize health inequalities, and (ii) which strategies are proposed to reduce them.

Study 4

To identify interventions during early childhood in countries from the World Health Organisation European Region in 1999–2013 which reduced inequalities in children's health and development.

3. RESEARCH QUESTIONS

The studies' research questions are detailed bellow:

Study 1

- What are the perspectives, beliefs and knowledge of policymakers on health inequalities and their causes?
- Which priorities do political institutions have regarding inequalities in health and sectors partaking in the policies?
- Do social actors participate in the policy making process and which barriers and opportunities policymakers encounter when implementing policies?
- What information is available on health inequalities in cities in Europe according to policymakers?

Study 2

- What are the perspectives, beliefs and knowledge of policymakers on health inequalities and their causes?

- What priorities do political institutions have regarding inequalities in health and sectors partaking in the policies?

- Do social actors participate in the policy making process and which barriers and opportunities policymakers encounter when implementing policies?

- What information is available on health inequalities in cities in Europe according to policymakers?

Study 3

- Which are the objectives of interventions according to city programme managers?
- Which is target population of the intervention?
- Which are the main activities, beginning and foreseen end and setting of the interventions according to the programme managers interviewed?
- Have interventions been evaluated are there any publications describing these?
- Did respondents describe any barriers and opportunities encountered?

Study 4

- Are health inequaties taken into account in municipal health plans?
- How do city governments conceptualise health inequalities?
- Which strategies are proposed in municipal health plans to reduce health inequalities?

Study 5

• Is there evidence that the case studies delivered improvements in the domains of childhood development that could contribute to subsequent reductions in inequalities in health?

• How do the services investigated deliver improvements in child development in the early years? Which interventions are more effective?

• Do the services provided reach all of their target groups? Are these the children and families who would benefit most?

• Could the interventions be transferred to other countries and be effective with comparable target groups?

• Could they be rolled out with sufficient scale and intensity to impact on the magnitude of health inequalities?

4. METHODS AND RESULTS

The five studies which form part of this thesis are detailed bellow as published articles:

1. Morrison J, Pons-Vigues M, Becares L, Burstrom B, Gandarillas A, Dominguez-Berjon F, et al. Health inequalities in European cities: perceptions and beliefs among local policymakers. BMJ Open. 2014;4(5):e004454.

2. Morrison J, Pons-Vigues M, Borrell C, Salas-Nicas S, MI Pasarin, Diez E. Public policymakers and their knowledge, perceptions and beliefs on inequalities in health and policies to reduce these in a Southern European city. Int J Equity Health. 2015, 14:18

3. Diez E, Morrison J, Pons-Vigues M, Borrell C, Corman D, Burstrom B, et al. Municipal interventions against inequalities in health: The view of their managers. Scand J Public Health. 2014:22;42(6):476-487.

4. Borrell C, Morrison J, Burstrom B, Pons-Vigues M, Hoffmann R, Gandarillas A, et al. Comparison of health policy documents of European cities: are they oriented to reduce inequalities in health? J Public Health Policy. 2013;34(1):100-20.

5. Morrison J, Pikhart H, Ruiz M, Goldblatt P. Systematic review of parenting interventions in European countries aiming to reduce social inequalities in children's health and development. BMC Public Health. 2014;14:1040.

The case studies carried out to complement the knowledge produced by the systematic review on early years interventions and programmes, may be found in Annex 1.

Paper 1

Morrison J, Pons-Vigues M, Becares L, Burstrom B, Gandarillas A, Dominguez-Berjon F, et al. Health inequalities in European cities: perceptions and beliefs among local policymakers. BMJ open. 2014;4(5):e004454.

Morrison J, Pons-Vigues M, Becares L, Burstrom B, Gandarillas A, Dominguez-Berjon F, et al.Health inequalities in European cities: perceptions and beliefs among local policymakers. BMJ Open. 2014;4(5):e004454. doi: 10.1136/bmjopen-2013-004454

Paper 2

Morrison J, Pons-Vigues M, Borrell C, Salas-Nicas S, MI Pasarin, Diez E. Public policymakers and their knowledge, perceptions and beliefs on inequalities in health and policies to reduce these in a Southern European city. Int J Equity Health. 2015, 14:18.

Morrison J, Pons-Vigues M, Borrell C, Salas-Nicas S, MI Pasarin, Diez E. Public policymakers and their knowledge, perceptions and beliefs on inequalities in health and policies to reduce these in a Southern European city. Int J Equity Health. 2015, 14:18.

Citació correcta:

Morrison J, Pons-Vigués M, Díez E, Pasarin MI, Salas-Nicás S, Borrell C. Perceptions and beliefs of public policymakers in a Southern European city. Int J Equity Health. 2015 Feb 12;14(1):18. doi: 10.1186/s12939-015-0143-5

Paper 3

Diez E, Morrison J, Pons-Vigues M, Borrell C, Corman D, Burstrom B, et al. Municipal interventions against inequalities in health: The view of their managers. Scand J Public Health. 2014:22;42(6):476-487.

Diez E, Morrison J, Pons-Vigues M, Borrell C, Corman D, Burstrom B, et al. Municipal interventions against inequalities in health: The view of their managers. Scand J Public Health. 2014:22;42(6):476-487.

doi 10.1177/1403494814529850

Paper 4

Borrell C, Morrison J, Burstrom B, Pons-Vigues M, Hoffmann R, Gandarillas A, et al. Comparison of health policy documents of European cities: are they oriented to reduce inequalities in health? J Public Health Policy. 2013;34(1):100-20.

Borrell C, Morrison J, Burstrom B, Pons-Vigues M, Hoffmann R, Gandarillas A, et al.Comparison of health policy documents of European cities: are they oriented to reduce inequalities in health? J Public Health Policy. 2013;34(1):100-20. doi: 10.1057/jphp.2012.57

Paper 5

Morrison J, Pikhart H, Ruiz M, Goldblatt P. Systematic review of parenting interventions in European countries aiming to reduce social inequalities in children's health and development. BMC public health. 2014;14:1040.

Morrison J, Pikhart H, Ruiz M, Goldblatt P. Systematic review of parenting interventions in European countries aiming to reduce social inequalities in children's health and development. BMC Public Health. 2014;14:1040.

doi: 10.1186/1471-2458-14-1040

5. DISCUSSION

5.1 Principal findings

The principal findings of this dissertation are: a) interviewed European policymakers were aware of upstream determinants such as socioeconomic and structural factors. Informant policymakers considered structural determinants caused health inequalities however, they described downstream policies and programmes to address these, b) informants agreed that reducing health inequalities was a priority of their local governments. Policies and interventions were targeted at modifying health behaviours, c) city intervention managers were familiar with health inequalities and concepts as intersectorality, participation and evidence-based action, but others such as socioeconomic aims, evaluation and sustainability were not so widely applied, d) only two health policy plans analysed defined health inequalities from the social gradient perspective, e) early years interventions with better outcomes combined various activities such as workshops and educational programmes for both parents and children beginning during early pregnancy and included home visits by specialised staff. These provided parents with training and material resources to enable them as active agents in intervention delivery.

The principle findings across all studies show that the majority of actions to reduce health inequalities in urban areas and during early childhood were downstream programmes or

interventions targeting those who are worst off. The majority of policymakers with some exceptions, referred to programmes implemented within their areas addressing proximal factors such as lifestyles and behaviours. Similarly, the majority of interventions identified in the systematic review addressing inequalities during the early years were small scale programmes aimed at disadvantaged families. Policymaker's roles in implementing healthy policies are very important and so are health plans as these are a road map for actions and programmes undertaken in cities. Similarly, research informing policy - such as systematic reviews - which synthesises relevant information for decision makers, is an important tool in reducing health inequalities. There is a gap between research policy and practice as our findings confirm and our systematic review on effective early years interventions aimed to provide policymakers information on which interventions are most effective for whom in which contexts.

Informants across studies made reference to the limited access to information to health inequalities. Elected politicians were an exemption. Similarly health plans across cities provided little information on this issue and focused on health inequalities defined as differences. Differences were addressed in health care centres placing emphasis on health care systems and the medical sector alone. The findings from the interviews and focus groups carried out with programme deliverers and high level programme managers suggested that

high level leadership was important to tackle health inequalities. Results across the studies show there is lack of collaboration between sectors in government. The ECD interventions identified however, describe some collaboration between health and social sectors. There was a consistent lack of evaluation of programmes and policies as according to most informants across studies. The interventions selected for the systematic review had undergone an evaluation but these are only a very small sample of programmes as the majority of implemented interventions and programmes on ECD are not evaluated formally.

The findings reported in the five papers supported our research questions and converged with previous studies. There was an internal consistency in findings between our different studies. By means of different complementary methodologies we have been able to gather information on services, policies and programmes to reduce health inequalities in Europe. Furthermore, all the concepts and results presented offer clear perspectives of future development, especially in the area of health inequalities, and establishing actions to promote early child development and healthy cities.

5.2 Policymakers and programme managers' perceptions of health inequalities in cities

Three discourses were identified depending on the city of the interviewee in paper I: (1) London's approach focused on upstream determinants and policies; (2) Cluj-Napoca and Prague's approach where informants were less acquainted with social health inequalities and (3) the rest of the cities' informants who perceived health inequalities as differences in life-expectancy among the population defined by their economic, social and geographical background. In the study focusing on policymakers from Barcelona officers and politicians referred to cultural, material, income and environmental factors as the main causes of health inequalities.

Most informants were aware of the concept of health inequalities and understood that there were differences in health and life expectancy among the population. The differences in participants' discourses were not determined by their positions or the sector in which they worked in, contrasting with the study I. When comparing with policy plans, we saw that the majority of the seven cities under study conceptualised health inequalities as an issue associated with excluded populations with poorer health which contrasted with the rest of the population. These results are in consonance with those of studies I and II. Most objectives made reference to the socioeconomic context: settings, health behaviours, and health

problems and related mainly to the health sector or promoted healthy settings. Some interventions were implemented in various middle income neighbourhoods throughout the city but most targeted and intervened in poorer neighbourhoods. City governments may have to prioritise carrying out actions in poorer areas due to limited resources (158). Consequently municipalities tend to prioritise targeted small scale interventions aiming at the most disadvantaged areas.

Most interventions described by programme managers in study III were aligned to upstream strategies, which is consistent with the recommendation of linking interventions with local and national priorities (61). Intervention managers, which in the majority of municipal structures would liaise with or have many common characteristics with officers, described being familiar with health inequalities and concepts such as intersectorality, participation and evidence-based action, but others such as socioeconomic aims, gradient approach, evaluation and sustainability were not so widely applied. City managers in study III explained that half of the interventions were addressed to the entire city population and the other half were developed in deprived areas. Policies specifically target these populations.

Downstream interventions targeting disadvantaged populations were also described by the European interviewees in study I, and did not aim at reducing inequalities throughout

the whole gradient. Initiatives may end up being diluted into multiple small downstream initiatives and are less effective in reducing health inequalities (11, 47).
Policymakers who participated in the studies understood the causes of health inequalities as low-income levels, unhealthy lifestyle behaviours and barriers in accessing healthcare. In the study focusing on Barcelona, health informants, saw health care services as important to address health inequalities, but were of the opinion that policies from other sectors were also necessary.

With the exception of Brussels' and London's interviewees, the concept of the socioeconomic gradient in health was not present among respondents in study I; their understanding of reducing health inequalities referred to reducing the differences between the most disadvantaged groups and the city's average population in terms of income. Their discourses did not seem to acknowledge that inequalities affect the entire population and not only those who are worst off (159).

Due to lack of time or simply because it may not be considered relevant to their work, officers may receive little or no further training on health inequalities and their determinants. In medical schools in many countries, lifestyles are referred to as an individual choice (3, 42, 160). It is also highly likely that politicians work closer to matters associated with the wider determinants of health and are more aware of

the causes which lie beyond individual lifestyles and this may reflect in their political views (58). Informants working in non-health sectors referred to policies from their own areas as examples and considered these had some impact on reducing health inequalities (21, 22).

5.3 City councils' limited authority

Some city councils may have limited authority over upstream determinants or over health related issues when these fall under the authority of higher levels of government (16, 18, 42). In study I informants from Paris and Brussels declared having no competences over health in their city. Policymakers referred to issues related to areas within their mandate. Most were aware of and understood the concepts of structural determinants and their fundamental role in promoting health equity. However, the activities they described focused on their own sectors. This possibly reflects that decision makers in these cities work within their sectorial silos instead of collaborating across areas. Similarly, intervention managers from cities included in study III described that the responsibility of implementing actions to reduce inequalities lied within the national or regional level. However, in some cases these could sometimes become a municipal responsibility. It was referred to as a dynamic process depending on policy and decentralisation processes (161).

These findings seem to suggest that addressing inequalities in health in urban areas requires actions carried out across the different levels of government. Many structural determinants which affect populations living in cities such as macro socioeconomic factors, welfare or labour policies are found with national governments or beyond (47). As city policies can favour addressing inequalities, it is important that policy documents in urban areas include health inequalities in their commitments. The importance and potential leverage of urban health policies must be understood within each context. In some countries national level policies provide an important background for constructing regional and local policies (154).

5.4 Reducing inequalities as a priority of the city government

The majority of the informants understood that reducing health inequalities was a priority for their governments. The city governments of Amsterdam, Barcelona, Helsinki, London, Madrid, Rotterdam, Lisbon and Stockholm counted with health plans, and within these only London has a specific plan for reducing health inequalities. The fact that some cities have health plans may be an indicator of political commitment towards addressing these in said cities. Our findings reflect different stages of awareness of city governments of health inequalities and actions undertaken.

The results of our study describe a spectrum of different approaches towards inequalities adopted by city and country governments throughout Europe. Interviewed politicians from Barcelona stated that reducing health inequalities was a priority for the city government and this is consistent with the reasoning that for politicians who are aware of this issue, it would be counter-productive to state otherwise. Politician informants in Barcelona explained that they received an annual health report. They may be more exposed to information on health inequalities and measures implemented and therefore more likely to consider it a specific objective for their government than officers or programme managers.

Within city governments, many actors and institutions have different roles and competencies (3) and the nature and coverage of plans and strategies vary. Some include all relevant actors on public health issues – such as the health plans of London and Stockholm- others only had specific elements of the public sector, mainly those related to health. Most of the health plans included in the study focussed on the health care sector instead of preventive policies across sectors. As reducing health inequalities requires intersectoral action and including health in all policies (11), actions would be more successful if these were led by the city government than within the health sector alone.

Officers included in the studies did not consider tackling health inequalities a priority of their city government. Officers' positions and responsibilities possibly depend less on processes linked to elections and party politics and this was possibly reflected in their discourses. Within policymakers interviewed, officers had worked in the same sector and position longer than politicians. Often, politicians may move from one sector or area to another after or even between elections depending on the structure and composition of the government or party strategies. It is possible that they described a different reality to officers for whom reducing health inequalities was not a clear priority for the city council.

As described elsewhere, the 2009 publication of the European Commission's *Solidarity in health: reducing health inequalities in the EU* (5) tried to achieve reducing health inequalities by establishing collaboration to tackle determinants across different sectors of government. This showed some political leadership to reduce health inequalities. It met this challenge at different levels of government establishing a horizontal strategy across areas and a vertical initiative which included European Union, national and sub-national levels of government. A recent report, *Health inequalities in the EU* (2), described how the financial crisis and subsequent austerity measures and cutbacks in social provision had hindered addressing health inequalities. This also had repercussion on reducing health inequalities. The report found that only a few

countries applied measures to reduce health inequalities at the national level through cross-sectoral action plans. Pan-European initiatives, such as Equity Action, explored possible policy actions, leading to the development of a range of tools and information on how policies at national and regional levels can take equity into account. Nevertheless, the findings of reports and other projects have not been widely implemented in policy making reinforcing a need for political leadership to establish reducing health inequalities as a priority.

5.5 Approaches to tackling health inequalities in countries and cities included in the studies

Among cities included across studies focusing on inequalities in urban areas, Stockholm and London had implemented comprehensive strategies to reduce health inequalities for a longer period of time (62, 162). This possibly encouraged developing documents with greater emphasis on tackling health inequalities. It may also explain why their health plans included a conceptual framework on the causes of health inequalities. Universal strategies were also more widely applied. When Stockholm's document was launched, the County Council had a Social Democratic government (2002–2006). A Labour (Social Democrat) government initiated London's strategy, but in 2008 the Conservative Party was elected and has governed until the present day. In Finland, the

long history of tackling health inequalities is reflected in Helsinki's documents where social democrats, conservatives, and the green party alternately have governed during the past few decades. In Helsinki there was no general plan with universal strategies. Finland delegates competences to health care centres. The social democratic governments of these cities may have had a political commitment to reduce inequalities.

In the Netherlands, a strategy for tackling health inequalities started in the 1990s along with the development of a research and policy programme. Both Amsterdam and Rotterdam had coalition governments when their health plans were developed and published. Rotterdam's document included more elements focusing on health inequalities than Amsterdam. It stated reducing health inequality as a general objective, included a conceptual framework, how to further develop good governance, and plans to evaluate policies in place. Differences between the two Dutch cities may be explained because poor health among (ethnic) minorities is a serious problem in Rotterdam. It is one of several factors contributing to poorer average health in Rotterdam than in any other Dutch city.

In Spain, health inequalities have barely been on the political agenda, although in 2008 a commission to tackle health Inequalities was launched when the Socialist Party was in

government (163). The right-wing government, in office since 2011, has put in place austerity measures which have hindered tackling the social determinants of health (164). Madrid has been governed by a right-wing party for many years and health inequalities have not been included in mainstream policy; however, they do appear in a specific section in the policy document analysed for this study. During the study period, Barcelona was governed by a social-democrat left wing and green party coalition.

Delivering small scale interventions to at risk populations only carries the risk of health inequalities becoming the responsibility of each individual, which is already an existing trend (120), and downplaying the responsibilities and competences of the city government which will constitute a barrier for the local city governments in tackling inequalities. It has been widely argued that if interventions are not delivered carefully, they are likely to increase inequalities as those who are most in need, might not benefit from the intervention (165).

Even though a universal approach is a desirable aim, the negative impact of the economic crisis and the determinants of health inequalities may be reduced by applying a proportionate universalism approach (11). However, as described elsewhere, the majority of research on health inequalities relates to downstream determinants and focuses on individual lifestyle factors (165) thus little information is provided to

policymakers on the wider determinants and the underlying causes of the causes of health inequalities (159).

Policies that explicitly address inequalities across the social gradient are more likely to take into account the social distribution of health and its determinants (1). In this sense, three cities (Madrid, London, and Stockholm) focused on the social gradient in study IV. The two latter cities also included a conceptual framework that takes into account the social determinants of health inequalities, proposing objectives to address these. In some cases, objectives directed at determinants fail to mention the aim to reduce health inequalities. ‘A good environment’ and ‘Good working conditions’, two objectives of the Stockholm strategy, make no mention of health inequalities, but they are surely directed at the determinants of health inequalities even though they have not been defined as such (8). The review by Vallgarda already described the social gradient approach of Swedish strategies (155) for Rotterdam, a city with a conceptual framework, the strategies are district focussed.

5.6 Access to information on health inequalities

With regards to information on health inequalities, with the exception of Lisbon and the Central-Eastern European cities in the project, most of the informants mentioned having access to periodical surveys or health reports. Policymakers with access to regular information on health inequalities would be more

likely to see the structural causes underpinning health inequalities and possibly willing to act upon them. Prague and Cluj-Napoca's informants expressed not being aware of the existence of inequalities in their cities possibly because they were not as familiar with the concept. There are some relevant studies on health inequalities in the Czech Republic (166-168) and in Romania (169). The overarching INEQ-Cities project aimed to provide the cities included in the project with further data on health inequalities at the small area level. Politicians in Barcelona received the annual health report published yearly (63). They may be more exposed to information on health inequalities and the measures applied than officers who did not receive the reports. Programme managers in study III referred to a number of core elements of good practice to aide them in running programmes and among these were sound evidence and wide use of quantitative data.

Data on health indicators and inequalities is important for many reasons. Understanding how causal pathways are established and to design effective policies and interventions are among them (61, 63, 145). While elsewhere it was concluded that researchers do not provide policymakers with befitting and timely information (56, 57) constantly requiring more evidence runs the risk of delaying having to face the problem and making decisions. Nevertheless, additional evidence on the social determinants of health, and particularly on effective interventions and policies is important. With pressure on

budgets underway in many countries, there is a need for evidence to support the case for investing in interventions. The majority of public health interventions are highly cost-effective (170), but more evidence is needed regarding upstream determinants (23).

There is still a need to increase the flow of evidence between research and policymaking (65) to widen the knowledge on upstream determinants and universal policies aimed at these. In a previous study (57) policy advisors there was a lack of information on the effectiveness and cost-effectiveness of policies. The challenges of providing evidence include cross-country differences in conducting health surveys, the visibility of researchers depending on their alignment with government priorities, and research funding. The need to bridge gaps between research, policy and practice has been described as important in many contexts (40). Coordinated action and political will may help bring these together (11, 68, 69).

5.7 Evidence mainly focusing on downstream determinants

Not only is there a need to bring policy and research closer together but to also focus on upstream determinants. There is a greater volume of evidence on potential interventions designed to have an impact upon individual risk behaviours (61, 171,

172). The majority of informants interviewed in our studies referred to downstream solutions and small scaled actions focussing on the micro level. Downstream (e.g. lifestyle) interventions were more readily linked to outcomes and were easier to identify by informants. The emphasis on short-term outcomes in our studies could reflect that policymakers and programme managers are more familiar with interventions focusing on lifestyles and health related behaviours to tackle the poor health of individuals.

A scoping review on policies and interventions in European cities to address health inequalities published in scientific journals, found that half of the identified papers promoted healthy behaviours (24). In a previous study performed in Canada which focused on differences between sectors regarding whether the concept of health determinants had permeated their discourse, workers in municipal governments cited 'healthy lifestyles' and 'clean air and water' as factors affecting health inequalities. 'Strong community' and 'income' were not seen as being very relevant (47). In other studies, also carried out in Canada, which explored whether the measures applied in their fields had an impact on health outcomes, labour and social services advisors saw these as a relevant outcome while those in finance where unaware of the social determinants and their impact on health (25).

5.8 Evaluation of policies

Most of the policymakers and officers interviewed in studies I and II explained that there was a lack of programme evaluation. Not all programs had been evaluated in study III although having undergone an evaluation was a criterion for selecting the interventions. Despite the importance of policy evaluation (61, 157, 173) this was not detailed in the policy documents analysed.

Despite the acknowledged importance of interventions to reduce health inequalities, there is more evaluation evidence of downstream interventions than there is of upstream interventions. It can also be difficult to secure research funding to evaluate universal policies, perhaps because of the lack of interest in findings. There is also little experience of evaluating the impact of interventions to reduce the gaps across the gradient (22, 46, 174). Many of the actions to improve the social determinants of health need to be implemented outside the health sector, so it is important to engage decision-makers in intersectoral evaluations.

5.9 Intersectoral collaboration

Many of the respondents across Europe, described participation between sectors at some level, even though not all cities showed the same involvement. Among programme managers, intersectoral actions and community participation were viewed as having gained ground in the cities. Most informants in the study focusing on policymakers from Barcelona referred to limited intersectoral collaboration due to the city governments' organisation and structure. However, a multidisciplinary collaboration between different sectors of the city council should be inherent to the concept of aiming policies at the social and environmental determinants of health inequalities (175, 176). Nevertheless, moving beyond the structural barriers in city councils may prove to be difficult and require going beyond specific individual initiatives. The lack of intersectoral collaboration is not only related to organisational barriers, but also to how health inequalities are perceived.

Informants across studies were of the opinion that the solutions often lie beyond the health sector, and require the engagement of different sectors of government and society. Urbanisation, housing policies and economic factors appeared in only some of the policy documents analysed, despite being a responsibility of the municipal governments. Perhaps, other sectors considered these areas to be outside the health sector.

If the approach of intersectoral action and ‘health in all policies’ is to be promoted these objectives should be included in health policy documents (177). Intersectorality, the alignment of an intervention strategy and resources shared between actors from different public sectors in order to achieve complementary objectives were considered relevant and valued by most informants in study III. Evidence from a Canadian study (178) observed that the structure of political responsibilities offered important constraints for inter-sectoral collaboration. Constraints may be due to overall lack of awareness of health inequalities among those who work in the city government, difficulties to coordinate with other authorities, a lack of mandate and limited resources (56, 147). Encouraging the continuation of collaborative strategies may have a substantial impact on reducing health inequalities. Previous research (163, 172) showed that inter-sectoral collaboration between the health and other sectors is essential in achieving health outcomes. Including other stakeholders in policy-making processes is an important step to city governance and empowerment, both decisive in reducing health inequalities more effectively.

5.10 Collaboration with social actors

With regards to social actors, they were perceived by politicians as service providers rather than actual stakeholders

involved in the policy making process. Officers on the other hand regarded their efforts in providing services and reaching users as essential. A previous study (3) describing governmental and organisations workers' perceptions described that they both agreed on having inter-institutional partnerships.

Municipal governments have smaller structures than state or regional governments and are more proximal to local institutions and citizens, and therefore, this may be advantageous for addressing health inequalities (179). Studies carried out in Canada described that policy advisors feared population backlash against measures implemented (65). Although, these and other barriers described by policymakers could be overcome by liaising with community agents and introducing new measures through participatory processes which may include a diversity of stakeholders. There are successful examples of third sector involvement in addressing health inequalities in different cities throughout Europe (15). The Neighbourhood's Law in Barcelona (180, 181), aimed at reducing social inequalities although not specifically in health, established a partnership between different sectors in the city council and community agents to renew deprived neighbourhoods.

5.11 Barriers and enablers to policy and programme implementation

Lack of awareness on health inequalities and bureaucratic restraints were the main barriers to reduce health inequalities as quoted by the interviewees across all studies and have been categorised elsewhere as ideological and institutional (47). Institutional limitations are related to values, attitudes and opinions; one possible explanation why this approach has been underlined is that informants seemed to focus mostly on lifestyles and healthy behaviours instead of structural determinants as the causes of health inequalities. The second group of barriers: rigid bureaucracy and funding-referred to by respondents across studies- might also be reinforced by the ideological barriers and exacerbated by the social and financial crisis and subsequent austerity measures.

Programme managers in study II emphasised that action on social determinants to reduce health inequalities requires a long-term and sustained implementation. This may be due to the long time-lags between interventions and health or social determinants impacts. These may act as disincentives for politicians to invest in the implementation of universal policies, or in their evaluation, because of the need to see short-term changes within tight political time frames (57). The lack of institutionalisation of equity interventions in many of the cities may compromise their desired impact.

5.12 Early years programmes to reduce health inequalities

a) Components of effective interventions

Programmes-identified in the systematic review-combing workshops and educational programmes for both parents and children, which began during early pregnancy and provided home visits delivered by specialised home visitors, had better health and developmental outcomes during early childhood. These also provided parents with training and material resources to enable them as active agents in intervention delivery and included elements such as interagency participation such as Incredible Years or CDI (46, 182). These promoted positive parenting and reducing negative and submissive conducts in children and outcomes were evaluated as more effective than programmes delivered by volunteers or other non-professional home visitors like the “Community Mothers Program” (133) or the “The Speech and Language Therapy” (SLT) and “Ready Steady Grow” (RSG) (183), delivered after birth during shorter periods. RSG, aimed at children 3–18 months showed more favourable outcomes for speech and language development than SLT, delivered to children 2–6 years old.

b) Interventions targeting disadvantaged families

The majority of interventions identified were targeted at children living in deprived areas similarly to interventions and

policies identified by respondents in studies I, II and IV. Interventions were aimed at reducing social inequalities in children's health and development by improving outcomes across the different domains among the most disadvantaged populations. Previous studies (184-186) suggest that living conditions for young families should allow mothers to begin pregnancy in a health-promoting environment as inequalities in health and development become set relatively early in life. Parents, teachers, health policies and services provide key guidance leading to the development of healthy outcomes (187).

To achieve equity from the start, it is important to foster the acquisition of cognitive and non-cognitive skills, which are strongly associated with educational achievement and with a whole range of other outcomes including better employment, income and physical and mental health (11). Delivering programmes and interventions in disadvantaged areas will possibly help reduce health inequalities in later life, adulthood and throughout the lifecourse. These may also help reduce the intergenerational transmission of health inequalities as social and economic inequities affecting previous generations present an important influence on children's life-course, and affects their life chances and health. Growing up in relative poverty has a strong influence on health and other outcomes throughout life (71, 120). However it has also been argued that while targeted pre-school education programmes have been

found to have long-lasting effects on the social trajectories of poor children, improving their educational levels and employment prospects, their life chances remain significantly poorer than those of advantaged children not in receipt of targeted support (188).

From a critical point of view, only two interventions offered a proportionate universal approach by targeting need within universal delivery. Nearly all interventions identified were targeted, offering selective provision of services to children showing early manifestations of a problem or were at-risk of developing a problem early in life, as defined by the Organisation for Economic Co-operation and Development (189). These were aimed at reducing inequalities in health and development among people living in deprived areas but not at levelling the social gradient in health. Within the gradient, health is progressively better the higher the socioeconomic position of people and communities. Therefore, it is important to design policies that act across the whole gradient and to address the people at the bottom of the social gradient and the people who are most at risk as described in the Review of social determinants and the health divide in the WHO European Region (120). In similar reviews the authors found that most of the parent/infant stimulation programs dealt with “high-risk” children or interventions which focused almost exclusively on downstream initiatives in deprived areas (23). Furthermore, the studies which were not targeted did not

describe in their findings whether they had a differential impact for disadvantaged groups. However, by focusing only on high-risk families' health outcomes, interventions are less likely to reduce inequalities across the social gradient and may not provide the best conditions for all children in which to develop and reach their full potential (11, 43, 45, 69, 96). Effective programmes should be universally available, with particular efforts made to ensure that all populations are reached, including the traditionally hard to reach (46).

c) Comparison with programmes which have not undergone an evaluation

The objectives of the case studies programmes included in Annex I of this thesis were to enhance children's development and health, to provide a space for parents and children and give parents support and assistance and delivering activities and structured play. The programmes were identified from within a sample of interventions provided by third party organisations collaborating with the Drivers project and do not necessarily represent all the programmes being delivered across Europe. Nevertheless, the results show similarities with the main findings in the systematic review of interventions in study (V). The interventions identified in this study also aimed to provide access to quality early education to reduce potential inequalities during the early development of children, especially for those who come from disadvantaged backgrounds.

The evidence from the review also showed that programmes which included prenatal visits had better outcomes than those starting after birth and those beginning during the first stages of life in turn had more favourable results than those beginning when the child was older. However, among the case studies described in this report, only the health visitor programme provided prenatal care.

d) Building on parenting capacities

In the systematic review, interventions were based on improving parenting skills. Much of the published literature on early years interventions focuses on providing parents with support to improve their child rearing skills. An analysis of inequalities across cohorts from 12 European countries, which also forms part of the Drivers project (25), illustrated that poor health is greater amongst children of mothers with low education. Therefore interrupting intergenerational transmission of inequalities is an important consideration (11). Longitudinal birth cohort studies, such as these, provide data which can help monitor health inequalities and the impact of early years interventions. A further example of a cohort study is the GUS longitudinal birth cohort commissioned by the Scottish Government in 2003 which collected data from three child cohorts and included aproximately 14,000 children. The findings showed associations between child outcomes and maternal health and behaviours such as smoking, long-term health problems or disability as well as confidence in parenting

abilities. These also suggested possible associations with measures relating to tenure stability and major life events, parental feelings about household income and the home learning environment.

These promote parenting behaviours which improve child cognitive development and help improve child attachment as positive effects of well-developed interventions, as described elsewhere, persist beyond schooling and into adulthood. It was mentioned by the majority of staff that delivering an intervention -aimed at young children and their parents- effectively, entails recognising the knowledge and capacities of parents. The programmes were aimed at strengthening parenting abilities to assist in their children's learning and development and most adapted to and understood the families' circumstances. Interventions involved parents through play and were flexible to ensure parents' participation. Programmes were delivered by staff from different disciplines, some such as Family Network were provided by a network of professionals. Staff saw providing a comprehensive range of services with the potential to reduce inequalities in children -to every mother and child, important. Similarly, other studies illustrated how parenting activities across income groups and the social gradient (96) fostered through ECD programmes were not limited to cognitive gains, but also included physical, social, and emotional gains, all of which are determinants of health over the life course (83). Further evidence also described that

parenting programmes offer valuable opportunities to positively influence children's health and create resilience (183).

However, while focusing on parenting is important, it is also necessary to address the conditions of daily life which make positive parenting difficult. This requires policies aimed at children through an explicit, multi-dimensional and integrated strategy (4) and investment in reducing child poverty and improved living conditions (1). An important aspect of early years programmes is the quality of relationships between the deliverer and the recipient as well as ensuring that the recipients who meet the eligibility criteria receive programmes relevant to their needs. Evidence from a study reviewing the literature on inequalities in ECD and health, which forms part of the Drivers project, showed that most social factors, at both the neighbourhood and household levels, influenced early childhood health and development extending across a wide range of adverse health and developmental outcomes in early life (190) Other interventions with favourable outcomes in improving child behaviour and reducing abuse and neglect such as "Triple P" (183), for example, were tailored to meet the child and family's needs and offered different levels and intensity of activities and support.

e) Quality childcare

High quality child care has been described as being crucial for children's development (43, 44, 191-193) and is seen as service provision in some countries: 85% of mothers with children in preschool were in paid employment in the early 1990s in Sweden, for example. In other countries it receives limited public funding, the quality and type of services being more diverse and access to high quality child care restrictive for families with lower incomes (194). However, only three studies assessing the impact of child care were identified in this review. Previous reviews - based on intervention descriptions - found that children's centres were increasing in number in the UK, as part of a strategy of social investment (195).

Studies by Melhuish and colleagues found that high quality children's centres appeared to reduce socioeconomic inequalities, as children from less advantaged backgrounds benefited more than those from more advantaged backgrounds. Preschool participation was associated with strong benefits for later educational and job outcomes (194, 196, 197). Similarly, Feinstein (84) found that RCT studies showed a clear benefit for disadvantaged children who attended high quality pre-school childcare provision. Effective pre-school provision in England and Northern Ireland has shown evidence of longer-term benefits for all children and as described in Currie (194) this evidence has influenced policy in

countries such as Australia, Norway and the Republic of Korea. Furthermore, the “Abecedarian Project” and the “Perry Preschool Project” delivered in the USA which showed very positive results as described earlier had high-quality childcare and education components and were highly resourced (43).

f) Early years programmes delivered in countries outside Europe

Some of the interventions identified are also implemented in countries such as Australia, Canada and the United States of America (USA). The Family–Nurse Partnership has shown long-term beneficial effects in the USA. It was evaluated by three RCTs and showed higher reading and mathematics tests scores in IG children. Long term evaluations showed children had fewer sexual partners, less smoking and drinking or ingestion of dangerous substances. Injuries and abuse were also reduced as was criminality during later years. In the UK, the FNP, has recently undergone a formative evaluation: nurses’ and mother’s feedback was very positive and provided support for the argument that group FNP-delivered to mothers who were not eligible for FNP-has been received well over the whole time period of the programme and good links were being made with other services (198). However, if further evaluations are carried out, the results may not be as positive as those in the USA because the health visitor system and a universally accessible primary care system are already in place in the UK (133).

The evaluation of “Sure Start” Australia discovered that that there were very little detectable difference between the Sure Start Local Programmes and Start-to-be communities on most of the dimensions measured by the evaluation (199), similarly to “Sure Start” in the UK. “Incredible Years” UK which showed favourable outcomes for socio-emotional development and behaviour replicated the results (200) found by Webster-Stratton’s evaluation of “Head Start” in the USA: intervention children were observed to exhibit significantly fewer conduct problems, less noncompliance and more positive affect than control children. One year later, most of the improvements were maintained (201). Therefore, interventions with similar components were able to obtain the same results in a different context.

The long-term outcomes of these programmes are important as children who show early persistent signs of antisocial behaviour are at greater risk of later juvenile delinquency and social exclusion with higher societal costs (201).

5.13 Barriers in implementing interventions

Beneficiaries participating in the case studies referred to fear of being judged as a barrier as well as some reluctance towards the programmes. In addition, insufficient capacity and

resources limited the number of children, families and or mothers attending the centres. Funding was described as a very important obstacle by staff working in programmes which were not funded by the government. Stigmatisation of users and/or showing some mistrust towards service providers and programmes may be customary within a prevailing culture of low levels of service provision. Furthermore, the gap in service provision was accompanied in some areas by a reduced use of existing infrastructures and lack of intersectoral collaboration.

6. LIMITATIONS AND STRENGTHS OF THE THESIS DISSERTATION

6.1 Limitations

Participants across all papers except those interviewed in paper II were selected by convenience sampling, they might not be the most representative informants in their fields; other respondents might have wider knowledge on the subject or they possibly participated due to their willingness and therefore may be more sensitive to the issue. Interviews were carried out by different interviewers from each city in their native language so that participants could express themselves more freely. Nevertheless, the informants included in this study were selected following the pre-established criteria so both elected and non-elected informants were highly positioned in their municipal government´s structure and had decision-making competences or were programme managers delivering and managing the interventions and therefore had access to first hand and valuable information on the programmes. Providing new rich and diverse views regarding the issues explored.

We were only able to analyse six cities' and one county's documents. Other cities included in the INEQ-CITIES project lacked health policy documents containing clear objectives. A richer comparison between policymakers' views and plans was therefore not possible. However, the analysis provided an

enriching and valuable insight to policies in urban areas which is a new approach and has been seldom carried out in Europe.

The limited number of retrieved ECD studies shows that although the number of publications in this field has increased over the years in Europe, there are still relatively few ECD intervention studies published in scientific journals. Complementary approaches to building the scientific evidence base therefore need to be implemented. Some of these complementary approaches to assessing the role of determinants and the effectiveness of interventions were explored by the case studies (Annex 1).

It is likely papers identified in the systematic review reflect publication bias against publishing wholly non-significant findings. Informants may have a response bias as high ranked policymakers may want to provide a positive image of policies in place and programme managers may want to promote interventions. However, analysing policy plans provided complementary information on the subject for some cities.

6.2 Strengths

A relevant strength of the dissertation is that interviewees included many examples of their everyday experiences and realities providing rich and detailed information. They expressed their own beliefs and describing these provides very

valuable information on the governance of cities given the key role of policymakers and programme managers. Moreover, carrying out the interview, an activity seldom performed previously, probably drew politicians to review the issue, update their knowledge. We carried out interviews with policymakers from city governments and identified several city health plans, whereas most previous studies focused on country or regional-level policy documents. As city governments are able to implement local policies to reduce health inequalities, the analysis of documents and policymakers and programme managers perceptions may help understand how the political agenda is focussed at the city level.

Language was not a barrier or an exclusion criterion for selecting informants or interventions. This enabled to describe actions from different countries across Europe addressing inequalities in health and development and their social determinants. The papers included in this thesis have relevant methodological strengths, namely triangulation of analysts-different researchers analysed the same data-and verification of results by participants.

The evidence collected may be useful for researchers or decision makers and programme managers involved in the design and development of interventions and their delivery.

7. RECOMMENDATIONS AND IMPLICATIONS FOR FUTURE RESEARCH

The challenge of reducing health inequalities should be tackled policies and actions across society and government. As described above, only a few efforts were described as having been evaluated. Similarly very few aimed at health inequalities through cross-government action. This thesis has deepened understanding of the perceptions, knowledge and beliefs of policy makers and programme managers and published evidence on municipal plans and programmes to reduce health inequalities. It has also examined which programmes and interventions were effective in reducing inequalities during early child development and health, providing evidence to better inform the development and implementation of policy.

In summary, the findings suggest the importance of placing more effort on providing available information on health and its social determinants, such as health reports and surveys. Specifically, periodical reports with relevant health indicators and information on health inequalities should be made available to policymakers. Research centres in cities and municipal governments should establish periodic meetings and long term collaboration to combine efforts in reducing the research-evidence gap. Further efforts to monitor health inequalities should be put in place.

As trends in urban areas show continued population growth and increasing inequalities, it is necessary to ensure that health inequality aims and objectives are included in the political agenda taking into account the multidisciplinary and multisectoral nature of tackling these. To achieve this, there needs to be political leadership and commitment. Many of the determinants of health lay outside the health sectors. Policies and plans implemented by municipal governments - even those without health competencies – need to overcome institutional and structural barriers to tackle the SDH across different and sectors and levels of government. Collaboration must be established, between sectors in city councils. Health should be addressed as a cross cutting issue. This may be fulfilled if policymakers from all sectors are made aware of the advantages including health in all policies.

Programme managers' capacities and political leadership in governance for health should be reinforced further by the city government. Examples of existing policies to address health inequalities across sectors should be provided to policymakers and, in particular, to officers. It may also foster expanding community resources and have an impact on health.

Future research should carry out further document analysis, perform interviews and focus groups. These should include informants selected by a theoretical and/or probabilistic

sample from different cities within countries in Europe. They should also take into account other stakeholders' perceptions and knowledge. Studies should have a mixed methods approach including quantitative data on health inequalities within the same cities. In addition evaluation studies should be performed on some of the interventions and policies identified in this thesis (please see the articles for more specific information on these).

Policymaking processes and plans in cities should take into account children's' health and development across sectors at the local level. Coordinated efforts need to focus on children's health by providing safe green spaces for child play and interrelation. Policies should ensure provision of quality public housing to those families who live in unfit conditions and in disadvantaged situations. Improvements in houses and installing safety equipment should also be provided. Quality service provision such as family services and quality child care should be provided by municipal councils, especially in less serviced areas and to those who cannot pay child care fees thus allowing women to return to paid employment..

Providing access to a comprehensive range of quality early years services to reduce inequalities during the early development of children, especially for those who come from disadvantaged backgrounds is paramount. To be delivered effectively, services should be universal but tailored to social

and economic need and recognise users' knowledge and capacities concerning the development of their children. Therefore, early years programmes should target need within universal delivery to reduce social inequalities in health and ECD. To achieve this, all children should have access to early years services and programmes beginning prenatally and include home visits. Programmes should include multidisciplinary teams. These should be flexible and meet family's needs providing more resources and time intensive attention to those in need.

Although it is important to provide parents with support to improve personal and parenting skills, it is also necessary to address the conditions of daily life which make positive parenting difficult. Parents should be empowered to develop their own educational skills thus strengthening their ability to assist in their children's learning and development. Existing ECD institutions and structures should be strengthened to promote cross-sector working between the social, education and health sectors. Specifically, programmes should be tailored by planning these with parents, taking their knowledge and circumstances into account.

Future studies should carry out an extensive systematic review of programmes published in the grey literature. More effort should be made to identify reports in languages other than English to include information on programmes carried out in countries outside the UK and Ireland. The evaluation of early

years interventions should include results showing whether these had a differential impact for disadvantaged groups. Future research should include policy document analysis to focus on upstream actions. Quantitative studies with cross country comparisons of the effectiveness of early years interventions would help shed more light on understanding which elements are most effective and what works, for whom in which contexts. These findings could be complemented by the results of the case studies included in Annex I.

8. CONCLUSIONS

We produced new evidence of inequalities in cities and early child development and policies and interventions to reduce these across Europe. The principal conclusions of this dissertation are that policymakers and managers were aware of health inequalities in their cities. Ways to address these were found in municipal plans and published scientific articles and reports. The lack of collaboration between research and policy was made evident by illustrating knowledge gaps. The lack of evaluation of programmes was pervasive across cities. Programmes were aimed mostly at population groups with disadvantage instead of across social gradients of health in society. Specifically:

- Policymakers in European cities were aware of health inequalities. Most described addressing downstream determinants targeting those facing disadvantage. Very few respondents referred to universal policies or programmes.

- For most cities reducing health inequalities was a priority according to respondents. Some policymakers described some limited intersectoral action and at least half had access to periodic information. Participants referred to lack of policy and intervention evaluation.

- Programme managers acknowledged the importance of interventions in reducing health inequalities. They referred to more evaluation evidence of downstream interventions than upstream ones.

- Policy documents from countries with a long history of action to reduce health inequalities had more comprehensive strategies to reduce health inequalities. City governments conceptualised health inequalities as differences in health between population with better levels of health and those who are worse off.

- Early years interventions improved early child development by combining various activities such as workshops and educational programmes for both parents and children beginning during early pregnancy and included home visits by specialised staff.

- Programmes achieved better outcomes in children's health and development by providing flexible services to strengthen parents' ability to assist in their children's learning by supporting and empowering parents. Services included professionals from different disciplines.

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Annex 1. Case studies

Morrison J, Goldblatt P, Pikhart H, Ruiz M. Early child development: Report on case studies. University College London. London: 2015.

Annex 2. List of conference presentations of the studies included in the thesis

- Systematic review of early childhood interventions in European countries (1999-2013) that aimed to address health and development. Morrison J, Pikhart H, Ruiz M, Goldblatt P. 27TH EUROPEAN PUBLIC HEALTH CONFERENCE Mind the gap: Reducing inequalities in health and health care .Glasgow, 19–22 November 2014. European Journal of Public Health, Vol. 24, Supplement 2, 2014.

- Morrison J, Pons-Vigués M, Díez E, Borrell C. “Perceptions and beliefs of public policy makers on health inequalities and policies to reduce them in 13 cities of Europe.” Presentation of a conference paper in the 30th scientific meeting of the Spanish epidemiology society. Santander, Spain; 2012. Gac Sanit.2012;26 Supl E3:162-5.

- Borrell C, Morrison J, Pons-Vigués M, Díez E. “Comparing health policy documents of European cities: ¿Are they oriented towards reducing health inequalities?” Co-author in conference paper in the 30th scientific meeting of the Spanish Epidemiology Society. Santander, Spain; 2012. Gac Sanit.2012;26 Supl E3:13-7.

- Morrison J, Pons-Vigués M, Díez E, Borrell C. “Health inequalities: beliefs of public policymakers of Barcelona.” Presentation of a conference paper in the 29th scientific meeting of the Spanish epidemiology society. Madrid, Spain; 2011. Gac Sanit.2011; 25:95-9.

- “Policies and interventions to reduce social inequalities in health in Barcelona: A discourse analysis”. Morrison J, Díez E, Borrell C, Pons-Vigués C. XXVIII Scientific Meeting of the Spanish Epidemiology Society. Valencia, Spain; 2010. Gac Sanit. 2010; 24: 243-50.