
HEALTH INEQUALITIES AND YOUNG PEOPLE IN IRELAND: A REVIEW OF THE LITERATURE



National Youth Council of Ireland

The National Youth Council of Ireland (NYCI) is the representative body for national voluntary youth work organisations in Ireland. It represents and supports the interests of voluntary youth organisations and uses its collective experience to act on issues that impact on young people.

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National Youth Health Programme

The National Youth Health Programme (NYHP) is a partnership between the National Youth Council of Ireland, the Health Service Executive and the Department of Children and Youth Affairs.

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Acknowledgements

NYCI would like to thank the following people for their contribution:

The authors of the report Dr. Elizabeth Kiely, Dr. Patricia Leahy-Warren and Dr. Elizabeth Weathers, (UCC) who conducted this literature review.

The members of the Research Advisory Group: Siobhan Brennan, Youth Health Senior Project Officer, Ailish O'Neill, Youth Health Project Officer and Marie Claire McAleer, Senior Research & Policy Officer.

NYCI colleagues who offered valuable feedback during the development and editing of the review, Elaine Lowry, Administration Manager & Daniel Meister, Communications Manager.

To the partners of the National Youth Health Programme for ongoing feedback and support: HSE, Department of Children and Youth Affairs and NYCI.



Disclaimer

The National Youth Health Programme is grateful to all those who have influenced and contributed to the development of this literature review. We are thankful for the ideas that have been exchanged and shared by various groups during the process. Every effort has been made to acknowledge the resources and materials that contributed to the development of the literature review.

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Designed by: Fuse.ie

First published in 2014 by National Youth Council of Ireland

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ISBN no: 978-1-900210-28-7

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FOREWORD

Young people across Ireland are growing up in a wide variety of settings and environments, all of which powerfully influence their health outcomes. The majority of young people in Ireland experience good health, however, the enjoyment of health is not evenly distributed across Ireland's youth population. There is a social gradient in health, meaning more advantaged social groups experience greater improvement in health and wellbeing alongside increased opportunities to lead a flourishing life. Reducing these health inequalities is a matter of fairness and social justice.

The National Youth Council of Ireland (NYCI) recognises that the youth work sector is well placed to address the area of health inequalities, building on its strong history of working to address social inequalities. Therefore NYCI identifies health inequalities as a priority area for action. There is a great willingness to tackle health inequalities nationally as identified in Goal 2 of Health Ireland 2013-2025 and through the national outcomes identified in Better Outcomes Brighter Futures 2014-2020.

In response, I am delighted to introduce this review 'Health Inequalities and Young People in Ireland: A Review of the Literature' which provides a solid base from which to progress the health inequalities agenda across the youth sector.

The review provides a comprehensive analysis and summary of key national and international evidence in relation to health inequalities, along with an overview of the extent of health inequalities among young people in Ireland.

In addition, the review highlights gaps and limitations in knowledge in Ireland as they relate to the Irish youth population. It provides an overview of recent policies and initiatives that can contribute to strengthening our capacity to address health inequalities across the youth sector.

NYCI and the National Youth Health Programme will work with partners across the voluntary and statutory sector to ensure a continued, integrated approach is taken to address the determinants of health and that investment is universal but at an intensity that is proportionate to the level of need.

Ailish O'Neill

Project Officer,
National Youth Health Programme

The National Youth Council of Ireland (NYCI) recognises that the youth work sector is well placed to address the area of health inequalities, building on its strong history of working to address social inequalities.

EXECUTIVE SUMMARY

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HEALTH INEQUALITIES AND YOUNG PEOPLE

EXECUTIVE SUMMARY - HEALTH INEQUALITIES & YOUNG PEOPLE

SEARCH STRATEGY

The purpose of the study was to review theory and literature on health inequalities and young people (aged between 10 and 25 years) and published since 2000. It sought to review, analyse and summarise key national and international evidence in relation to youth health inequalities in a systematic and thematic manner.

OBJECTIVES

- To provide an overview of the extent of health inequalities amongst young people in Ireland
- To identify strengths and gaps in current Irish health inequalities research in relation to young people
- To consider what might contribute to strengthening Ireland's future capacity for addressing youth health inequalities by reviewing recent national + international policies and initiatives.

RESEARCH METHODOLOGY

The project involved desk based research. A systematic review of the literature was first undertaken to identify Irish and other research conducted on health inequalities and young people and to review national and international policy initiatives or interventions. The two electronic databases searched were SocIndex and Sociological Abstracts – ProQuest.

For the first initial search, the following terms were used: (“Health equalit*” OR “Health inequalit*” OR “Health discriminat*” OR “Health prejudic*” OR “Health disparit*”) AND (Teenagers OR Young adults OR Youth OR Children). This search was limited by language (English only), year published (from January 2000 onwards and article type (peer reviewed research article).

Publications were selected based on the following inclusion criteria:

- 1 Research pertaining to children and young people aged up to 25 years of age;
- 2 Research published relating to Ireland, other European countries, Canada, Australia, New Zealand and the US.

A second search was then conducted of the same databases to identify literature (English only publications since 2000) pertaining to policy and practice interventions developed to tackle health inequalities in young people. The following terms were used: (“Health equalit*” OR “Health inequalit*” OR “Health discriminat*” OR “Health prejudic*” OR “Health disparit*”) AND (Teenagers OR Young adults OR Youth OR Children) AND (audit OR intervention OR evaluation OR practic* OR initiativ*). The first and second searches generated a sample of 107 and 28 papers, respectively, a total of 135.

A search of the grey literature was conducted predominantly to source relevant policy documents and Irish material on health inequalities. For the purpose of this review, grey literature is defined as literature deemed very relevant by the research team to meeting the objectives of the review but not available through the two electronic databases used to conduct the systematic review (SocIndex and Sociological Abstracts – ProQuest) This grey literature was accessed by conducting a Google and Google Scholar search and by exploring institutional/organisational websites that were identified as most relevant by the research team

TIMEFRAME

The research commenced September 2013 and the first draft of the report was completed in December 2013. Following a peer review process, the research report was updated and finalised for publication in December 2014.

STRUCTURE OF THE FINDINGS PRESENTED

A life-course framework developed by Graham and Power (2004) in the UK was used and adapted to structure the findings of the national and international review of the empirical research findings relating to youth health inequalities. The findings are discussed under the themes: General Background; Cognition and Education; Social Identities; Health Behaviours; and Physical and Emotional Health.

Findings relating to the review of policies and interventions to address health inequalities are presented according to a framework developed by Whitehead (2007). The framework outlines four different categories of interventions; Strengthening Individuals, Strengthening Communities, Improving Living and Working Conditions, Promoting Healthy Macro Policies.

FINDINGS

General Backgrounds of Young People

- Socio-Economic Status (SES) is established as a very reliable predictor of youth health disparities.
- Early interventions can improve the social circumstances and health of children.
- Links between parental education and child health are evident.
- The deterrent effect of GP user charges in the Irish health system is a particularly significant finding where children in low income families are concerned.
- Interventions need careful planning and ongoing evaluation to ensure they are serving the needs of socio-economically disadvantaged youth and not just youth in general.
- Health promoting interventions have been shown to produce incremental improvements in poorer children and young people's health.
- Knowledge about poor health outcomes and how these outcomes relate to geographic location have been shown to be useful to better locate interventions where they are most needed.
- Some young people have demonstrated considerable resilience when confronted with adverse health outcomes, thus mediating their very worst effects.
- Two key risk markers for less satisfactory social and health outcomes are longterm dependence on social assistance and chronic family instability experienced by children at a young age.
- Access to social and cultural capital has been acknowledged as playing a part in explaining SES based health inequalities.
- While the welfare regime of a country has been found to contribute to health outcomes, socio-economic inequalities among young people are evident in countries regardless of different welfare regime types.
- Public health strategies in all countries (regardless of their welfare regime type) need to retain a focus on youth health inequalities.
- Low paying and poor quality training and employment may not protect families from experiencing poor health and wellbeing in the way that good quality training and employment do.

COGNITION AND EDUCATION

- While the link between poor educational attainment and health is well established, in an attempt to better understand this link, factors such as educational content, experiences and opportunities, school based peer relations and personal resources have all been identified as important in better elaborating the complicated but evident relationship between education and unequal health outcomes.



SOCIAL IDENTITIES

- Some evidence indicates that higher levels of depressive symptoms among sexual minority youth than heterosexual youth is linked to victimisation, discrimination, negative life events, chronic strains, social support, and psychological resources.
- In Ireland, there is an evident disparity in the health status of the Traveller community compared to the general population.
- Social and cultural marginalisation and discrimination such as that experienced by some groups in the population can reduce the opportunities they have at their disposal to experience good health. There is evidence that cumulative effects of disadvantage experienced by minority groups over the life-course can have a negative impact on their health status relative to other groups in the population.

HEALTH BEHAVIOURS

- Limited engagement in physical activity tends to increase overweight with an associated decline in health.
- Smoking status was shown to be linked to GDP per capita of a country and youth from countries with more unequal distributions of income were more likely to be currently smoking. Furthermore, smoking status was also found to be influenced by gender, race and ethnicity.

STRENGTHENING INDIVIDUALS

- Some interventions targeting parents to improve parental health and health outcomes for children have been found to be effective in the short and medium terms. Re-entry points in later childhood to prolong the benefits are also recommended.
- There is a strong case made in the literature in favour of early years' interventions to address child and health inequalities.

STRENGTHENING COMMUNITIES

- Health interventions targeting young people in poor communities and designed to diversify or strengthen their community social networks have been found to provide young people with greater opportunities and support to live healthy lives.
- Young persons' families' and communities' abilities to harness the capitals (i.e. resources, social connections etc.) at their disposal for their health vary by a range of factors, most notably migrant status, social class, sexual orientation and location.
- Interventions with a specific focus on building resilience within social support networks for minority youth, and initiatives reducing discrimination, can be expected to have a positive effect on youth mental health and well-being. Furthermore, such interventions need to be cognisant of ethnic status and how it interacts with the health of young people.

IMPROVING LIVING AND WORKING CONDITIONS

- While good well-paying employment offers protection from ill-health, poor quality and low paying employment does not, as the evidence reviewed shows that this is also strongly associated with poor family health and wellbeing.
- Pursuing work first policies which emphasise employment in any available job are, based on evidence, highly unlikely to address poor health outcomes. In this context, health first employment policies have been advocated.

PROMOTING HEALTHY MACRO POLICIES

- In more socially divided societies, it seems to be more difficult to adopt policies favourable to the reduction of social and health inequalities.
- The causes of social and health inequalities are complicated, multiple and interconnected, but interventions reviewed are rarely interconnected across sectors and levels of intervention. Therefore, it is very difficult to be confident as to what combination of actions is best to pursue to reduce health inequalities in any given context because ‘the science in this field is far from answering that question’ (Whitehead, 2007, 477).
- There is a need for more and better knowledge at national and international levels on interventions that are effective at tackling health inequalities.
- Health and other social policies have to prioritise those who are more socially and economically disadvantaged in order to reduce health inequalities - actions must be universal, but with a scale and intensity that is proportionate to the level of disadvantage (proportionate universalism).
- The strongest interventions are those, which attack disadvantage experienced at the start of life and which clearly impact on subsequent health.
- Effective strategies where unhealthy behaviours (e.g. smoking, alcohol consumption and obesity) are concerned usually need more than education and information, they also require taxation, regulation, planning policy and other public health measures designed to ensure that persons feel supported to exercise control over their lives and to feel capable of changing their behaviours.

GAPS IN KNOWLEDGE RELATING TO YOUTH HEALTH INEQUALITIES IN IRELAND

- Studies of child and youth health inequalities tend to rely heavily on longitudinal datasets, of which there are a very limited number in Ireland and as a result limited research expertise specific to the field of longitudinal research.
- Since 2006 the DCYA has produced four State of the Nation’s Children (Department of Health and Children, 2006b, 2008a, 2010 and Department of Children and Youth Affairs, 2012) reports based on data collected and research conducted. These describe the lives of children in Ireland, track some changes over time and provide a benchmark on progress in particular areas of children’s lives in Ireland relative to other contexts. Indicator areas tend to be broadly disaggregated in relation to geography, gender, age and time but not all are, according to social class.
- Despite being a very vulnerable group in the population, there is a dearth of data on the health outcomes of the children in Ireland who experience the care system.
- Growing Up in Ireland (GUI) and the Health Behaviour of School Aged Children (HBSC) provide considerable potential in terms of exploring the links between factors (social class, education, race and ethnicity, employment, welfare dependence, sexual minority status) and health outcomes. The research opportunities offered by the GUI dataset are only beginning to be realised and as further waves of data collection are completed, some gaps in information on healthcare access and healthcare inequalities in Ireland relative to other contexts and indeed for different age categories of children and young people as distinct from adults, may be filled.
- While there is evidence indicating that cultural and societal norms and values do interact with health inequalities, they tend to be neglected in research and policy possibly for ethical reasons or because they are perceived to be not so amenable to change.
- While building information and an evidence base, which can be effectively translated to inform policy and intervention is important, it helps if services are also made very aware that they are working to deliver reductions in health inequalities and that they are being expected, supported and resourced to do so.



NATIONAL AND INTERNATIONAL POLICY CONTEXT

A social determinants approach to addressing health inequalities is being increasingly developed and embedded in international, EU and country policies designed to tackle health inequalities and a human rights approach is viewed as providing an important framework in this regard. In the UK, the Marmot Review (Marmot Review Team, 2010) is widely cited in the literature and this sought state led action on health inequalities to occur across all the social determinants of health. In recognition of such health inequities persisting across and between countries in the EU region, a review of such inequities was commissioned by the WHO (World Health Organisation, 2013) to support the development of the new European policy framework for health and well-being, *Health 2020*. This review was built on global evidence and it recommended policies needed to reduce health inequities and narrow the health divide across countries. To achieve greater equity, action was recommended on the social determinants of health across the life-course and but also in the wider social and economic spheres towards achieving greater equity and protecting future generations.

In 2001, a health strategy entitled *Quality and Fairness A Health System for You* (Department of Health and Children, 2001) was introduced in the Irish context, which was built on a number of principles, one of which was equity. Aside from commitments to reduce health inequalities in national policies, a number of discrete health policies in Ireland were developed over the period of this review and they also include a health inequality focus. However, the continuity of health inequalities at the same time as a two-tiered health system has become more entrenched poses questions about successive Governments' commitments over the time period. The main thrust of an independent report, by TASC, (a think tank dedicated to drawing attention to the high level of economic inequality in Ireland) *Eliminating Health Inequalities: a Matter of Life and Death* (Burke and Pentony, 2011) was towards wealth and income redistribution and recommendations were put forward in the report as to how this could be progressed in Ireland. Amnesty International Ireland (2011) *Healthcare Guaranteed? The Right to Health in Ireland* argued that while there is mention of human rights principles in Irish health policy over time, there is no significant systematic integration of human rights into the Irish health system and policy infrastructure. The report made a number of recommendations focused on making enough provision in legislation, policy and provision for people to exercise their right to health in the Irish context.

The report made a number of recommendations focused on making enough provision in legislation, policy and provision for people to exercise their right to health in the Irish context.

In 2013, the Irish government launched *Healthy Ireland, a Framework for Improved Health and Wellbeing 2013-2025* (Department of Health, 2013). This report acknowledges that health and wellbeing are not evenly distributed across Irish society and identifies the reduction of health inequalities as one of the primary future health goals. The report acknowledged the need for a broad focus on addressing the wider social determinants of health – the circumstances in which people are born, grow, live, work and age – to create economic, social, cultural and physical environments that foster healthy living. *Better Outcomes Brighter Futures, the National Policy Framework for Children and Young People 2014-2020* is the Department of Children and Youth Affairs' (2014) current policy relating to children and young people. The evidence base for the different objectives of this policy is to a significant extent informed by Growing Up in Ireland data. Most relevant to this review are its undertakings to tackle inequalities in health outcomes for identified vulnerable groups; its focus on promoting healthier lifestyles, mental health literacy and early intervention services in accordance with the Healthy Ireland Framework.

KEY POLICY RECOMMENDATIONS

- The evidence reviewed indicates that much more needs to be achieved in the Irish context to cultivate a good start in life for every child and sustain it through middle childhood, adolescence, youth and early adulthood.
- Effective measures to encourage and support breastfeeding practice generally, but also particularly among lower socio-economic groups of women and younger women, need to be strengthened in the Irish context.
- Wrap around supports and easily accessed services before as well as during pregnancy and the first few years of life could make up part of a strategy worthwhile pursuing in the Irish context.
- Greater state assistance would be welcome to help families meet the high costs of childcare particularly when these costs prohibit parents from taking up good employment opportunities.
- Relative poverty in childhood influences health and other outcomes throughout life and as it continues to remain high in Ireland, this has to be prioritised for action.
- Improving mothers' educational attainment and employment chances in Ireland could be a strategy pursued to enhance children's wellbeing and protect them from deprivation.
- The evidence reviewed provides support for the Government's intention to introduce universal health insurance and to remove GP fees for all.
- Waiting lists for health treatments indicate the problems experienced by children accessing significant health services. They highlight failure to respond to many children's health needs in a timely way, thus negatively impacting on their health and quality of life now but with serious consequences for their futures. Effort is needed to ensure children can access health treatments in a very timely manner.
- Collective resources in the form of good public policy, welfare provision and accessible good quality services are required to supplement the resources poorer people have at their disposal to be and stay healthy.
- Policies at the point of being planned should be proofed for their impact on health inequalities, considering the positive and negative connections between many different social policies and health outcomes, which are well documented in the literature.
- Protecting the social and health sectors particularly from austerity demanded cuts is a requirement if existing health inequalities are not exacerbated.
- Accessible, affordable and high quality sexual and reproductive health services for all young people are very important but good adolescent health needs a broader complement of services that stretch well beyond good sexual health provision.
- A number of groups of children and young people in the Irish population (young Travellers, young migrants, young carers, looked after children, young homeless persons, young people with disabilities, LGBT youth etc.) are identified as in need of more targeted health and wellbeing initiatives in a strategy of proportionate universalism (universal provision but more intensively targeted at the most disadvantaged or marginal).

KEY RESEARCH RECOMMENDATIONS

- The value of qualitative data generated by ethnographic research studies in families, schools and other settings might also be considered in the Irish context in terms of enhancing understanding and uncovering how health inequalities are experienced by young people on a day to day basis and how interventions to impact these inequalities are experienced.
- In a context of limited resources for research, effort needs to be made to ensure all national administrative databases required for research purposes are fit for purpose and include enough items to capture the information most needed about groups in the population. Working towards the standardisation of data gathered by health and social care agencies is also important in this regard.
- Disaggregated data collection and analysis (for example by age and sex) would provide greater insight into differences experienced by groups of young people in accessing healthcare and how cost might operate

as a barrier in this regard. It would also assist policy planning and better monitoring of progress in young people's health needs.

- The health status of children and young people in care has not been differentiated from that of the general population of children and young people and this would be an issue worthy of investigation, considering the association between lower socio economic status and experience of the care system.
- Research focused on the impact of the economic crisis and the resulting austerity, on the health and wellbeing of the most vulnerable groups in the population, needs to be conducted. Its findings should be used to positively correct any negative outcomes detracting from giving children the best start in life, which if left uncorrected, will only deleteriously impact on their health and life chances as adolescents, young adults and future parents.
- A research agenda devised to increase our understanding of the interconnections between social capital and health outcomes as well as resilience and health outcomes for poorer children and young people in Ireland is worthy of consideration. The understandings gained might be used to inform effective interventions designed to help some groups of young people make better use of their personal and other resources as well as social networks to improve their wellbeing and life circumstances at local levels.
- The establishment of a Health Inequalities Institute as in the UK and a child /youth health inequalities inventory or repository would be very welcome in terms of developing a stronger infrastructure and an evidence base for policy making to address youth health inequalities by acting on the social determinants of health.

FINAL CONCLUSION

As noted in *The Spirit Level* (Wilkinson and Pickett, 2009) though the effect of social inequality is felt most by those at the bottom of the social scale, everyone does better in a more equal society. The challenges seem to be in relatively unequal societies, to build solidarity and greater cohesion and to make the choices required to close the inequality gap. In this context and to build the will for concerted action, political parties, policy actors and members of the Irish public need to be convinced of the harm done to all; individuals, communities and wider society, by not tackling health inequalities.

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INTRODUCTION

INTRODUCTION

Health inequality is a complex and challenging issue in society. There are many factors that contribute to health inequalities such as socio-economic status and health behaviours. Health inequalities, as defined by Dahlgren and Whitehead, (2006) are “differences in health outcomes between and within population groups.” Health inequalities have three distinguishing features i.e. they are (i) systematic, that is they are not random but follow a consistent pattern; (ii) socially produced and therefore modifiable; and (iii) widely perceived to be unfair or inequitable.

Health inequalities among young people are less well documented than in other age groups in the international and Irish contexts (West and Sweeting, 2004; Molcho et al. 2008; Karvonen & Rahkonen, 2011). In the Irish context, it is only in recent years that socio-economic health inequalities among young people have begun to be better explored with the development of the HBSC FAS (the Family Affluence Scale) (Molcho, 2008), which provides a more useful measure than parental SES (socio-economic status). It is also evident from the literature that little is known about the effectiveness of different strategies designed to combat health inequalities among young people and among different groups of young people, for example, lower socio-economic groups of young people (van Lenthe et. al., 2009). From the international and Irish literature, it is evident, that youth health inequalities are related to social class positioning (Gabhainn et al. 2008), age (Currie et. al., 2008), gender (Layte and McRory, 2011), ethnic or minority status (UCD, 2010; Gebrekristos, 2012), geographical/spatial location (van Lenthe, et. al., 2005) and that these different factors can also intersect in particular ways to compound or alleviate health inequalities. In Ireland, within the youth population there are groups, who are perceived to be higher risk than other young people, of experiencing ill health. These include young people in poorer families, Travelling young people, migrants and young people with disabilities (Molcho et. al., 2008; Irish Medical Organisation, 2012). Indeed welfare state regimes and policy choices, particularly fiscal redistribution policies, are also identified as very important in explaining variations in young people’s health status in different countries (Graham & Kelly, 2004; Richter et. al., 2012; Wilkinson and Pickett, 2009). Increasingly in the literature, family and social capital have also featured prominently in studies designed to better understand health inequalities particularly as they relate to young people and in studies of strategies designed to ameliorate their worst effects (Waterston et. al., 2004; Almgren, et. al., 2009; Morgan, et. al., 2012).

It is also evident from the literature that little is known about the effectiveness of different strategies designed to combat health inequalities among young people and among different groups of young people, for example, lower socio-economic groups of young people.

1 Social capital is a loose concept used in different ways. It is used by Waterston et. al., (2004) to refer to a sense of belonging or a level of involvement in community affairs or to the quality of informal social supports in communities.

METHODOLOGY

METHODOLOGY

AIMS

The aim of this review was to analyse and summarise the key evidence in relation to health inequalities among young people aged between 10 and 25 years. The specific objectives of the review were to:

- Analyse and summarise the key national and international evidence in relation to health inequalities in a systematic and thematic manner.
- Provide an overview of the extent of health inequalities amongst young people in Ireland.
- Identify the strengths and limitations of Irish research, thus clearly distinguishing the gaps in knowledge in Ireland as they relate to Irish youth.
- Provide an overview of recent international policies and initiatives that may contribute to strengthening Ireland's future capacity for addressing youth health inequalities.

METHODS

Search Strategy

A systematic review of the literature was first undertaken to identify Irish and other research conducted on health inequalities and young people and to review national and international policy initiatives or interventions.

The following electronic databases were searched:

- SocIndex
- Sociological Abstracts – ProQuest

A combination of search terms were used separated by Boolean phrases 'and/or'. Furthermore, the following search symbol: * was used after terms. This symbol ensured that variants of the word were also sourced e.g. nurs* (nurse, nursing, nurses). Inverted commas were

also used around some terms to ensure that the entire phrase i.e. the two words together was sourced, rather than separately. For the first initial search, the following terms were used: ("Health equalit*" OR "Health inequalit*" OR "Health discriminat*" OR "Health prejudic*" OR "Health disparit*") AND (Teenagers OR Young adults OR Youth OR Children). This search was limited by:

- Language (English only)
- Year published (January 2000 to November 2013)
- Article type (peer-reviewed, and research article).

Publications were selected based on the following inclusion criteria:

- 3 Research pertaining to children and young people aged up to 25 years of age;
- 4 Research published in Europe, Canada, Australia/New Zealand, and the US.

Publications were excluded if they pertained to countries that were not socially/culturally similar to Ireland (e.g. developing or Third World countries, Asian countries, etc.), or if the research pertained to those younger than 10 years old or older than 25 years old. Furthermore, review papers and discussion papers were excluded.

A second search was then conducted in the same databases to identify literature pertaining to policy and practice interventions developed to tackle health inequalities in young people. The following terms were used: ("Health equalit*" OR "Health inequalit*" OR "Health discriminat*" OR "Health prejudic*" OR "Health disparit*") AND (Teenagers OR Young adults OR Youth OR Children) AND (audit OR intervention OR evaluation OR practic* OR initiativ*). This search was limited by:

- Language (English only)
- Year published (January 2000 to November 2013)

A summary of these searches and the search strategy used is contained in Appendix 1 (see Table 1, p127).

Grey literature search

A search of the grey literature was conducted predominantly to source relevant policy documents and Irish material on health inequalities. For the purpose of this review, grey literature is defined as literature deemed very relevant by the research team to meeting the objectives of the review but not available through the two electronic databases used to conduct the systematic review (SocIndex and Sociological Abstracts – ProQuest) This grey literature was accessed by conducting a Google and Google Scholar search and by exploring institutional/organisational websites that were identified as most relevant by the research team e.g. the Institute of Public Health, the Health Research Board, the Government Departments of Health and Children and Youth Affairs, the Health Service Executive, the Equality Authority, the Health Service Executive Crisis Pregnancy Programme and the Economic and Social Research Institute. Repositories searched include Lenus (the Irish Health Repository), Irishhealth.com (an independent health website promoted by MedMedia Group), the Health Well Health Inequalities Hub (a health information website managed by the Institute of Public Health in Ireland). Furthermore, a review of key national reports, publications and papers generated from longitudinal datasets was conducted. These included Growing Up in Ireland Reports and the Health Behaviour of School Aged Children Surveys. Key stakeholder commentaries on the Irish health system and the direction of policy were also reviewed which include a TASC Report (2011); the Children's Rights Alliance Report Cards 2009-2014), the Amnesty International Ireland Report (2011) and the Institute of Public Health reports.

Key Irish government health policies focused on addressing health inequalities since 2000 were considered as were other highly influential evidenced based strategies designed to tackle health inequalities at European level or in other contexts. These were The Marmot Review (2010)

Fair Society Healthy Lives, the BMA (2013) report *Growing up in the UK: Ensuring a Healthy Future for All Our Children*, the British Academy (2014) report *If You Could Do One Thing.... Nine Actions to Reduce Health Inequalities* and the UCL Institute of Health Equity's (2013) *Review of Social Determinants and the Health Divide in the WHO European Region*, commissioned by the WHO regional office for Europe. The current European Health Policy Framework *Health 2020* was also included as it has a specific focus on assisting governments and other societal actors to address health inequities within and across the EU region. The WHO (2014) report *Health for the World's Adolescents* was consulted as it provides a possible focus and structure for policies and programmes directed at adolescents and young people through governments, NGOs and the United Nations into the future.

In the Irish context, the Government Department of Children and Youth Affairs policy framework (DCYA, 2014), it's National Strategy for Research and Data on Children's Lives 2011-2016 (DCYA, 2011) as well as a progress report on implementation of the strategy (DCYA, 2013) were also reviewed. These extra sources provided up to date information on the state of data and research on health inequalities and young people and insight into the capacity of our policy infrastructure to address youth health inequalities in this context, as compared with others. An additional grey literature search beyond the two academic databases was necessary in light of the fact that few studies pertaining to health inequalities and young people in the Irish context were accessed as a result of conducting the search of peer reviewed journal articles.

Data extraction

After limits were applied in the systematic search strategy, all citations generated through the search were exported to Endnote©. An abstract review was conducted to identify articles that appeared most relevant to this review and duplicates were removed. An overview of the selection and review process underpinning the systematic search is included in the flow diagram in Figure 1.

In the first search, articles were excluded for the following reasons:

- Not a research article (i.e. a dissertation, discussion or review paper; n=81)
- Not relevant to health inequalities (n=30)
- Not relevant to young people (n=19)
- Not culturally relevant (e.g. about African Americans, Hispanic, Latinos etc.; n=35)
- Does not pertain to the countries specified in the search strategy (n=36)
- Duplicates removed (n=4)
- Pertains to research prior to 2000 (n=2)
- Pertains to development of an instrument (n=2).

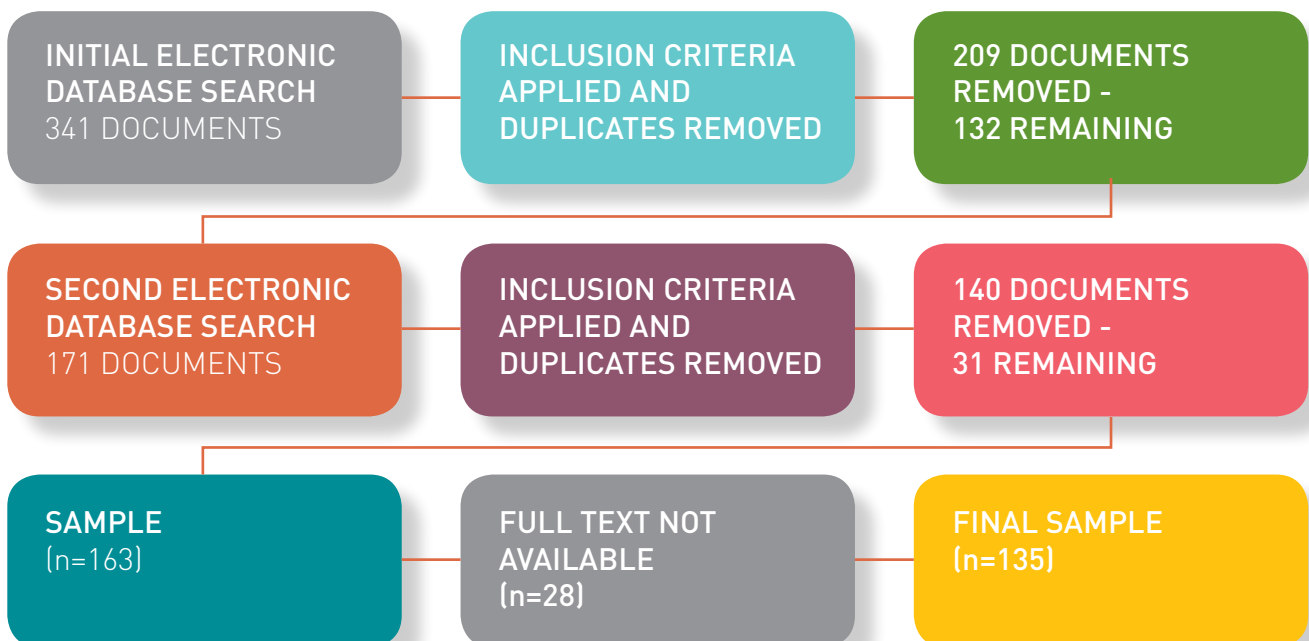
In the second search, articles were excluded for the following reasons:

- Not a research articles (n=34)
- Not relevant to health inequalities/ interventions to tackle inequalities (n=13)
- Not relevant to young people (n=11)
- Not culturally relevant (n=34)
- Does not pertain to countries specified in the search strategy (n=38)
- Duplicates removed (n=8)
- Pertains to research prior to 2000 (n=2).

Structure of Review

The full text peer reviewed journal articles were retrieved (where available) for the final sample included in the systematic search. In the first search, the full text version could not be sourced for 25 of the 132 papers. In the second search, the full text could not be sourced for 3 of the papers. This left a sample of 107 and 28 papers, respectively. Hence, the final sample for the systematic review was 135. Citations were initially organised according to date (oldest to newest). It was then decided to structure the systematic review around four sections: 'Part A: a Systematic

Figure 1 Selection and Review Process



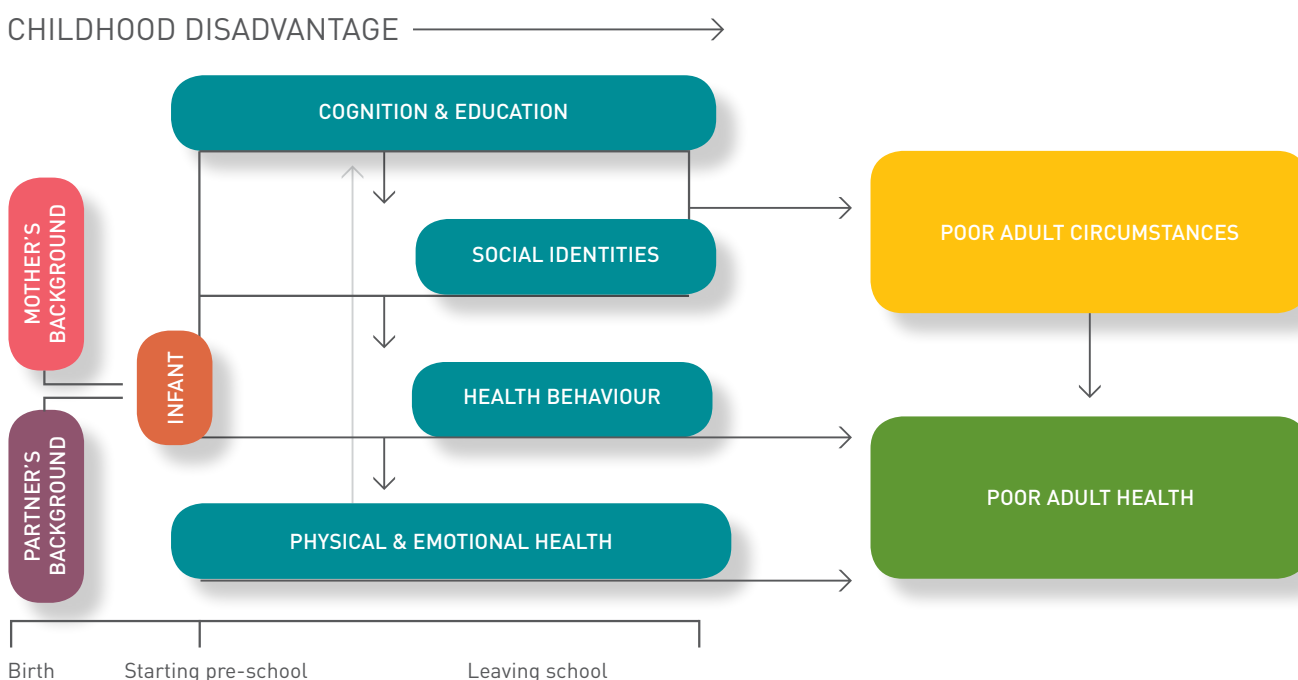
Review of Research on Health Inequalities’, ‘Part B: Policy, Interventions, and Practice Initiatives Addressing Youth Health Inequalities’, ‘Part C: Key Policy Reports’ and ‘Part D: Irish Research on Health Inequalities in Young People’. Part A and much of Part B were informed by the peer reviewed journal articles found as a result of the systematic search of the two academic databases. The grey literature search conducted for the review informed Parts C and D.

In order to better synthesise and interpret the literature, it was decided to structure Part A of the review around a life-course framework developed by Graham and Power (2004) in the UK. This framework (see Figure 2, p19) is a schematic representation of the dynamic links between childhood circumstances and adult health. The framework begins with childhood disadvantage which is said to stem from parental disadvantage. Childhood disadvantage is said to be linked to poor adult health based on several pathways. Direct pathways include the development of physical and emotional health, and the development of health behaviours. Other indirect pathways include cognitive development and educational progress,

and investment in social identities (e.g. becoming a parent in adolescence/early adulthood). According to Graham and Power (2004), these indirect pathways shape adult health, mostly through their impact on adult circumstances, but also through their influence on health behaviours which in turn influence children’s physical and emotional health. Hence for the purposes of this review the articles sourced were categorised under the following headings: Background; Cognition and Education; Social Identities; Health Behaviours; and Physical and Emotional Health. The ‘Background’ section was broadened to include research pertaining to general background i.e. gender, migrant status and income etc., not just parental background.

The ‘Background’ section was broadened to include research pertaining to general background i.e. gender, migrant status and income etc., not just parental background.

Figure 2 Life-course Framework [Source: Graham and Power, 2004]



Part B of the review focuses on policy and practice interventions developed to address health inequalities. It was decided to structure this part of the review around a framework developed by Whitehead (2007). The framework outlines 4 different categories of interventions (see Figure 3, p21). Category 1 includes interventions aimed at strengthening individuals in disadvantaged circumstances, and using person-based strategies. According to Whitehead (2007), such interventions theorise the problem mainly in terms of an individual's personal characteristics, and the solution in terms of personal education and development to make up for these deficiencies e.g. health information campaigns, life skill groups, one-to-one counselling/support. Category 2 pertains to a wide spectrum of interventions aimed at strengthening communities through building social cohesion and mutual support. The interventions at this level are said to fall into 2 groups: horizontal and vertical (Whitehead, 2007). **Horizontal interventions** include community development initiatives. **Vertical interventions** are aimed at creating vertical bonds between different groups from the top to the bottom of the social scale e.g. building inclusive social welfare systems and initiatives to strengthen the democratic process and make it easier for the disenfranchised to participate. Category 3 includes initiatives that identify the critical cause of observed health inequalities as greater exposure to health-damaging environments with declining social position. This is coupled with poorer access to essential goods and services such as safe food supplies, education and healthcare. Examples include some of the classic public health measures to improve access to adequate housing, sanitation, uncontaminated food supplies, safer workplaces, and better access to health and social care. Category 4 locates the causes of health inequalities in the overarching macroeconomic, cultural and environmental conditions prevailing in a country. Therefore interventions in this category are aimed at altering the macroeconomic

or cultural environment to reduce poverty and the wider adverse effects of inequality on society. These include measures to ensure legal and human rights, and 'healthier' macroeconomic and labour market policies.

Vertical interventions are aimed at creating vertical bonds between different groups from the top to the bottom of the social scale e.g. building inclusive social welfare systems and initiatives to strengthen the democratic process and make it easier for the disenfranchised to participate. Category 3 includes initiatives that identify the critical cause of observed health inequalities as greater exposure to health-damaging environments with declining social position. This is coupled with poorer access to essential goods and services such as safe food supplies, education and healthcare.

Figure 3 A Typology of Actions to Reduce Health Inequalities (Source: Whitehead, 2007)

CATEGORY 1: STRENGTHENING INDIVIDUALS

CATEGORY 2: STRENGTHENING COMMUNITIES

CATEGORY 3: IMPROVING LIVING AND WORKING CONDITIONS

CATEGORY 4: PROMOTING HEALTHY MACRO-POLICIES

Part C of the review, predominantly based on the grey literature search, is divided into 2 sections: the first one discusses key European initiatives addressing health inequalities and young people, and the second section discusses key Irish actors and policy reports on the topic. Finally, for Part D, two of the most relevant key areas identified for action in the Marmot Review (Marmot Review Team, 2010) were used to structure this section which focuses on providing an overview of health inequalities experienced by children and young people in Ireland².

These were:

- 1 Giving Every Child The Best Start in Life
- 2 Enabling all children, young people and adults to maximise their capabilities, and have control over their lives.

Discussion of Advantages and Limitations of the Literature Review Conducted

Because of the search strategy, the databases chosen to search, the key words utilised to search or the exclusion criteria employed, it

may well be the case that international and Irish research studies were missed, which are relevant to this review. The review is intended to be as comprehensive and objective as possible, but significant time and budgetary constraints restricted the number of academic databases to two which could be searched. A grey literature search was also vital to ensuring that Irish evidence on children and youth health inequalities were included but this material took considerable time and effort to locate as well as to review. The selection of only two of six key areas from the Marmot Review (Marmot Review Team, 2010) to thematically organise material obtained from the grey literature search on Irish youth health inequalities limited what was covered. However, this was necessary in view of the allocated timeframe and resources. The research team are of the opinion that the two different search strategies employed, provide depth and breadth in terms of the information provided. Brief study design details are provided throughout the review where feasible to enable the reader to make some distinctions between studies and to judge the quality of the evidence produced accordingly.

The authors of this review would also like to acknowledge the insights provided by Donna O’Leary (Research Officer, HSE South) and her assistance in sourcing some grey literature sources relevant to this section of the review.

PART A:

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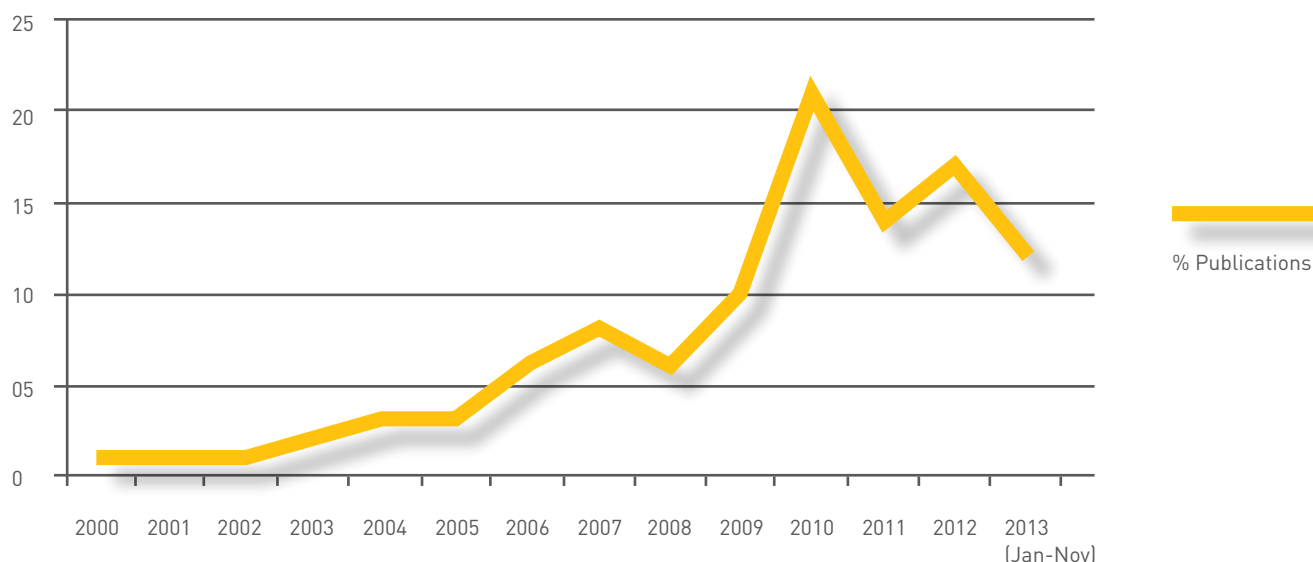
**SYSTEMATIC REVIEW
OF RESEARCH ON
HEALTH INEQUALITIES**

Part A: Systematic Review of Research on Health Inequalities AND YOUNG PEOPLE

DESCRIPTIVE SUMMARY

There was an upward trend in the number of peer reviewed journal articles on health inequalities and young people published from January 2000 to November 2013 with over 70% being published within the past 5 years (Figure 4). In terms of research design, the majority of the studies reported in peer reviewed journals were descriptive and quantitative in nature and only a small number adopted a qualitative or mixed methods design. There was a wide variation in terms of sample size across the individual studies with the majority recruiting large samples (→1000) or performing secondary analysis on large datasets.

Figure 4 Percentage of peer-reviewed articles by year of publication



BACKGROUND (PARENTAL, DEMOGRAPHIC ETC.)

The studies assigned to this category included research investigating the impact of demographic variables (e.g. age, gender) and other background variables (e.g. parental background, material deprivation, socio-economic status) on health status. The studies were grouped into subcategories and then reviewed in chronological order.

Socio-economic Status

Parental Education and Child Health

The link between socio-economic status (SES) and health inequalities is well documented in the literature. SES is regarded as one of the most reliable predictors of health disparities (Seabrook and Avison, 2012). Yet, it is difficult to synthesise the findings from previous research on SES due to the measurement inconsistencies. For example, Halldórsson, Kurst, Köhler, and Mackenbach (2000) used parental education and occupation, and family income as indicators of SES to examine whether socio-economic differences in health existed among a random sample of young people (n=908) aged

2-17 years from 5 Nordic countries (Denmark, Finland, Iceland, Norway, and Sweden). Indicators of child health included having at least one chronic condition, experiencing at least one moderate or severe symptom at least every other week, and short stature - reported height in the lowest decile for age and sex in the total material. Results showed that parents in lower socio-economic groups in all countries reported more ill health for their children at all ages. Halldórsson et al. (2000) concluded that inequalities among young people are important because children have no influence on the socio-economic circumstances into which they are born. Furthermore, they argue that deviations from normal health would be more difficult to rectify in later life, when they are more established. Hence, they recommend early interventions directed at both social circumstances and the health of children.

Chen, Martin, and Matthews (2006) used level of parental education as a measure of SES to determine whether childhood health disparities are best understood as effects of race, SES, or synergistic effects of the two. A secondary analysis of data from children aged 0 to 18 years (n=33,911) from the US National Health Interview Survey (1994) was conducted. Three health outcomes were assessed: general health ratings, chronic childhood conditions, and acute childhood conditions. Results showed that for overall health, activity and school limitations, and chronic circulatory conditions, the likelihood of poor outcomes increased as parental education decreased. These relationships were stronger among white and black children and weaker or non-existent among Hispanic and Asian children. Meanwhile, Hispanic and Asian children whose parents have a low level of education maintained healthy outcomes. Chen et al. (2006) concluded that this result points to other factors (e.g. the role of social networks, social norms and lifestyle factors) which possibly buffered these children from health problems. Similarly, Wen (2007) found that family structure, SES (i.e. the poverty income ratio and items measuring parental education,

living conditions, and home ownership), and healthcare factors could not explain disparities in child health among the Asian participants in a nationally representative sample of more than 30,000 children aged 17 or younger in the US. Wen (2007) argues that this could be attributed to the diversity of the Asian group with people from almost 50 different countries classified within this group. These findings highlight several avenues for future research including research exploring the buffering factors of parental SES and health, and qualitative and quantitative studies exploring health inequalities amongst racial/ethnic groups, particularly among Asian groups. Such research may help identify modifiable factors that impact on inequalities in child health. Findings of such research would inform the development of interventions that could utilise these factors to improve health outcomes. For example, interventions that encourage social networks among at-risk young people may be developed. Wen (2007) recommends that parental education should also be taken into account when developing future health policy and interventions – particularly maternal education which has been shown to be associated with self-rated health (Kestilä et al., 2005).

Results showed that parents in lower socio-economic groups in all countries reported more ill health for their children at all ages. Halldórsson et al. (2000) concluded that inequalities among young people are important because children have no influence on the socio-economic circumstances into which they are born.

In Poland, Lipowicz, Koziel, Hulanicka, and Kowalisko (2007) examined the relationship between SES in childhood and cardiovascular disease (CVD) in adulthood (i.e. age 50) using a longitudinal design with a sample of men and women from the age of 8 years to the age of 50 years. SES in childhood was measured using objective (father's educational level and number of children in the family) and subjective (self-assessed SES in childhood declared in early adulthood i.e. age 25) indicators. Results showed no significant relationships between the objective measures of SES with the appearance of CVD in adulthood for either men or women. In terms of the subjective measure of childhood SES, no significant relationship was found between this and CVD in adulthood for men. However, women who declared better SES in childhood were found to be significantly healthier at the age of 50 (OR=3.43, p=0.02). This relationship appeared to be independent of BMI, SES and life-style in adulthood. Lipowicz et al. (2007) proposed that the gender differences in the results might be due to varying cognitive abilities and perceptions with women assessing their own lives differently from men. Therefore, interventions developed to address the link between SES and health should pay attention to gender differences. Lipowicz et al. (2007) also concluded that father's education and family size are not appropriate measures of SES and that retrospective, self-assessed measures assess different components of SES.

Karvonen and Rahkonen (2011) investigated the association between subjective social status (SSS) and health, while controlling for own and familial socio-economic position (SEP). A sample of 15-year olds who had grown up in the context of low social inequalities (n=2369) was recruited. Data were derived from studies carried out in 2004 in 29 secondary schools in Helsinki. SSS was measured with the youth version of the MacArthur scale of SSS (Goodman et al., 2001). Outcome measures included self-rated health, health complaints, presence of limiting longstanding illness, and psychiatric morbidity. Results showed that SS was associated with health and adolescents who perceived their

family to be in a lower social stratum reported poorer health. This association remained strong even after adjusting for objective measures of socio-economic position. Karvonen and Rahkonen (2011) conclude that subjective rating of socio-economic status probably capture aspects of social hierarchy that are more subtle and less well represented in the conventional socio-economic measures. Similarly, Remes and Martikainen (2012) examined mortality differentials in late adolescence and early adulthood by both parental social background (family structure in childhood, parental education, occupational class and income) and young people's social position (level of education, current main economic activity) and living arrangements. Strong excess mortalities were found among young people with lower education, non-employed, and those living without a partner. The effects of parental social background were smaller and largely mediated by the current factors (level of education in particular). Adjusting for both childhood and current factors, leaving the parental home at a young age remained independently associated with premature death.

IN SUMMARY, HALLDÓRSSON ET AL. (2000) FOUND THAT AS CHILDREN HAVE NO INFLUENCE ON SOCIO-ECONOMIC CIRCUMSTANCES INTO WHICH THEY ARE BORN, RESEARCH EXPLORING INEQUALITIES IN THIS AREA CONTINUES TO BE IMPORTANT. FURTHERMORE, LEVEL OF PARENTAL EDUCATION AS AN INDICATOR OF SES, IMPACTS ON CHILD HEALTH AND PARENTAL GENDER SHOULD ALSO BE CONSIDERED IN FUTURE RESEARCH (CHEN ET AL., 2006; LIPOWICZ ET AL., 2007; WEN, 2007). KARVONEN AND RAHKONEN (2011) FOUND THAT ADOLESCENTS WHO PERCEIVED THEIR FAMILY TO BE IN A LOWER SOCIAL STRATUM REPORTED POORER HEALTH. ALTHOUGH THE LINK BETWEEN PARENTAL EDUCATION AND CHILD HEALTH IS EVIDENT, THIS MAY BE MEDIATED FOR ADOLESCENCE BY THEIR OWN LEVEL OF EDUCATION (REMES AND MARTIKAINEN, 2012).

Income, Education and Empowerment

Mossakowski (2008) examined the extent to which multiple dimensions of past and present SES explain the influence of race and ethnicity on depression in young adulthood. Data from the US National Longitudinal Survey of Youth (1979-1992) was examined, which is based on a nationally representative probability sample of young adults (n=7,975 for this study). Respondents were initially interviewed at ages 14 to 22 and again at ages 27 to 35. Present SES was measured using a continuous education variable (number of years completed) and dichotomous variables were used to assess poverty and wealth. Firstly, results revealed that all the measures of past and present SES differed significantly by race and ethnicity with white people being the most advantaged. Results also showed that black people and Hispanic people have significantly higher levels of depressive symptoms than white people. These differences were partially explained by family background and wealth, and substantially explained by the duration of poverty across 13 years of the transition to adulthood. Mossakowski (2008) concludes that the duration of past poverty across 13 years of the transition to adulthood is a mediating mechanism of the relationship between race/ethnicity and depressive symptoms. Similar to previous findings, Mossakowski (2008) recommends that the limitations and relevance of each measure of SES should be considered. Yet, in spite of the inconsistencies in conceptualisation and measurement of SES, it is evident that levels of income and education impact on health. For example, in the UK, Violato, Petrou, and Gray (2009) investigated the association between household income and adverse child health outcomes. A secondary analysis of data from a nationally representative longitudinal birth cohort study with almost 8000 children was conducted. Results showed that household income has a weak direct effect on child health after controlling for maternal child-health-related behaviours, parental health, and grandparental socio-economic status for example, maternal behaviours included breastfeeding practices and

maternal employment. Limited breastfeeding and returning to full-time work early were both significantly associated with increased probability of childhood respiratory diseases such as asthma. Similarly, poor maternal health status was significantly positively associated with childhood asthma and wheezing. Furthermore, lower levels of grandparental socio-economic status were associated with increased probability of suffering with poor respiratory health. Violato et al. (2009) concluded that the inherited human, social and health knowledge transmitted across generations seems to have an impact on child respiratory health. It was further concluded that these results are reflective of the publicly funded health care system in the UK which differs from countries where private health insurance prevails in terms of the association between household income and child health. Violato et al. (2009) also suggested that government policies aimed at increasing income transfers to families with children might not be the most cost-effective way of tackling the problem of inequalities in adverse child health outcomes. Instead, they recommend programmes of early education targeted towards those at highest risk of deprivation, and public health measures that encourage breastfeeding practices, encourage the adoption of more flexible and part-time working practices for mothers with young children, and stronger campaigns for discouraging smoking during pregnancy. Additionally, they recommend further research investigating the mechanisms that underlie the income-child health association. Similarly, Braveman, Cubbin, Egerter, Williams, and Pamuk (2010) described socio-economic disparities in the US across multiple health indicators and socio-economic groups. Data were obtained from 5 nationally representative data sources: the Period Linked Birth/Infant Death Data File (2000-2002); the National Longitudinal Mortality Study (NLMS; 1988-1998); the National Health Interview Survey (NHISL 2001-2005); the National Health and Nutrition Examination Survey (NHANES; 1999-2004); and the Behaviour Risk Factor Surveillance System (BRFSS; 2005-2007). Results showed that those with the lowest

income and who were least educated were consistently least healthy. Braveman et al. (2010) call for health policies prioritising the socially disadvantaged. For example, Babey, Hastert, Wolstein, and Diamant (2010) found that lower-income adolescents were at disproportionate risk for adulthood obesity as well as related conditions such as diabetes, hypertension, heart disease, stroke, and cancer. A secondary analysis of data from the California Health Interview Survey, which consisted of a sample of adolescents (n=17,535) aged 12-17 years, was used. Results showed no statistically significant differences overall in obesity prevalence among Californian adolescents between 2001 and 2007. However, within each survey year, there was an inverse relationship between family income and obesity prevalence and the magnitude of this income disparity in obesity prevalence more than doubled in the period 2001-2007. Previous interventions aimed at reducing obesity prevalence have focused on physical inactivity, sweetened beverage consumption, and skipping breakfast. Babey et al. (2010) suggest that such interventions may be failing to help adolescents from low-income families, and particularly male adolescents. Hence, they recommend that interventions be adapted to better serve the needs of low-income adolescents.

It is well established that children who live below the poverty line experience higher morbidity and mortality rates than children from higher income families. Using a risk and resilience framework, Yoo et al. (2010) examined whether five child health-promoting behaviours by caregivers would be associated with caregivers' assessments of their children's health as "excellent," controlling for an array of risk factors for adverse health outcomes. Using data from the Illinois Families Study (IFS) and logistic regression analysis, findings revealed that low-income children (age 1-7 years) whose caregivers exercise child health-promoting behaviours (e.g. mealtime routines, dental hygiene practices, safety practices), with the exception of having a regular bedtime, were more likely to be reported as having excellent

It is well established that children who live below the poverty line experience higher morbidity and mortality rates than children from higher income families.

health than their low-income counterparts. Moreover, a significant cumulative effect above and beyond the individual effects of health promoting behaviours was found suggesting that individual child health promoting behaviours by caregivers may lead to incremental improvements in low-income children's health. However, expectations of individualistic behaviour changes are unrealistic in the absence of Governmental policy and legislative supports in reducing health disparities for all members of society. In seeking to explore the nuances of an individual's level of socio-economic status (SES) and how it influences their health outcomes, Gage and Panagakakis (2010) conducted an in-depth qualitative study with 25 parents of children with cancer. The purpose of the study was to elucidate how SES influences patterns of navigating the health care community after serious medical diagnosis. Findings reported that parents with high SES advocated vigorously on their children's behalf and view themselves as collaborative members of the health care team, and peers with physicians. Meanwhile, low SES parents enact a good patient style approach where they maintain boundaries between patient and provider roles. Study findings demonstrate the disempowerment of parents of low SES in engaging equally with health care professionals who may not be perceived as partners in care. Overcoming these barriers for low SES parents requires interventions that are tailored specifically to addressing communication skills, accessing and interpreting knowledge and confidence in working in partnership with health care professionals. Improving access to knowledge and facilitating interpretation of health related knowledge, particularly for young adults is crucial in positively

influencing their health care behaviours and consequently their health outcomes. In recent decades, access to knowledge has widened considerably due to the worldwide web, however, assessing its effectiveness can be challenging. Howard et al. (2011) explored if web-linked computer interventions can help low-income minority teens maintain or increase condom use. The study was conducted with African-American low income teen females (n= 103, intervention group and n=151 comparison group) seeking services at the teen family planning clinic. The intervention took place during health care clinics while participants were waiting for their appointment. The intervention was a 5-minute PowerPoint presentation on condom use and also links to specific websites. Findings revealed that directed learning using technology may help reduce health disparities experienced by low-income minority youth by increasing protective behaviours. However, these findings need to be interpreted cautiously due to the small number of samples in both intervention (n=23) and comparison groups (n=39) that were followed up at 3 months. Nevertheless, the increase in use of technology by adolescents is well documented and thus interventions that are relevant and pertinent to their lifestyle and communication behaviours need to be considered. In addition, it was evident from this small study that adolescents require direction and education about where to access specific accurate knowledge online tailored to their specific healthcare needs.

Some studies have identified a link between health outcomes and the geographic location or neighbourhood a person is living in.

IN SUMMARY, LEVEL OF INCOME AND DURATION OF POVERTY ADVERSELY AFFECT HEALTH OUTCOMES INCLUDING OBESITY-RELATED CONDITIONS SUCH AS DIABETES, HYPERTENSION, HEART DISEASE, STROKE, AND CANCER (BABEY ET AL., 2010; BRAVEMAN ET AL., 2010; MOSSAKOWSKI, 2008; VIOLATO ET AL., 2009). HOWEVER, POSITIVE PARENTING CAN BUFFER THE EFFECT OF LEVEL OF INCOME AND ADVERSE CHILD HEALTH OUTCOMES (YOO ET AL., 2010). IN ADDITION, PARENTS WHO ENACT A GOOD PATIENT STYLE APPROACH BY ADVOCATING FOR THEIR CHILDREN ARE MORE CONFIDENT IN WORKING IN PARTNERSHIP WITH HEALTH CARE PROFESSIONALS (GAGE AND PANAGAKIS, 2010). THEREFORE, INTERVENTIONS THAT ARE TAILORED SPECIFICALLY TO ADDRESSING COMMUNICATION SKILLS, ACCESSING AND INTERPRETING KNOWLEDGE AND CONFIDENCE IN WORKING IN PARTNERSHIP WITH HEALTH CARE PROFESSIONALS ARE NECESSARY. FOR EXAMPLE, USE OF TECHNOLOGY MAY HELP REDUCE HEALTH DISPARITIES BY INCREASING PROTECTIVE BEHAVIOURS (HOWARD ET AL., 2011). IN CONCLUSION, THERE IS CONSISTENCY OF EVIDENCE THAT INDIVIDUALS FROM LOWER SES FAMILIES REPORT POORER HEALTH OUTCOMES, WHICH ALSO NEED TO BE CONSIDERED IN THE CONTEXT OF GEOGRAPHICAL LOCATION.

Neighbourhood/Location

Some studies have identified a link between health outcomes and the geographic location or neighbourhood a person is living in. For example, Johnson, Schoeni, and Rogowski (2012) examined the relationship between neighbourhoods of residence in young adulthood and health in mid-to-late life in the US using data from the 1968-2005 Panel Study of Income Dynamics. The sample consisted of persons aged 20-30 in 1968 who were followed for 38 years (n=2730). Results showed that living in poor neighbourhoods during young

adulthood was strongly associated with negative health outcomes in later-life and accounted for one quarter of the variation in health status in mid-to-late life. Johnson et al. (2012) concluded that these results can help policy-makers develop interventions such as early childhood interventions or targeted policies for the geographic de-concentration of the poor. Beck, Simmons, Huang, and Kahn (2012) investigated whether geographic information available at the time of asthma admission predicts time to re-utilisation (re-admission or emergency department revisit). A descriptive correlational design was used and a geographical social risk index was constructed from coded home addresses linked to census tract extreme poverty and high school graduation rates and median home values. A cohort of children hospitalised with asthma in 2008 and 2009 in Ohio was recruited. Results showed that 39% of patients re-utilised within 12 months. Furthermore, those at medium and high geo-social risk had 1.3 and 1.8 times the risk respectively, compared with those at low geo-social risk. It is argued that a geographical social risk index may help identify asthmatic children likely to return to hospital. These findings also make a case for targeting risk assessments and interventions according to geographic information which may improve outcomes and reduce disparities.

Poverty

The contribution of poverty to health inequalities is evident in the literature (Hernandez, Montana, and Clarke, 2010). For example, Backett-Milburn et al. (2003) started from the premise that in survey-based work, children's own voices are absent as adult-defined data about health and illness consistently increases. Carried out in a large Scottish city, using semi-structured interviews supplemented by a range of child-friendly research techniques, boys and girls (aged 9-12) living in two communities, one affluent and one poor, were the subject of the reported study. Parents were also interviewed and observational work as well as community profiling was also undertaken. The significant findings were that children and parents

Accounts of considerable resilience in the face of adversity generated by inequality were also elicited in the data.

described starkly contrasting lives and opportunities which regularly involved material differences. Greater opportunities, choices and safety nets were the preserve of the more affluent families. However, the children also spoke of the importance of having control over their life world, of the importance of parental care and love, of friendship and peer acceptance, thus locating inequalities in relationship and social life as well as in material concerns. Though aware of social and economic inequalities in the causal explanations put forward for ill-health, they emphasised those explanations emphasising individual lifestyle and psychological factors. Accounts of considerable resilience in the face of adversity generated by inequality were also elicited in the data. For example, children suggested that with the support of friends or by developing their own personal resources, they could prevent negative life events and experiences from having too much of an adverse impact on their sense of self and future health. Further research using robust study designs exploring the concept of resilience and its effects on ameliorating adverse health outcomes for marginalised youth groups in society is required.

Torsheim, Currie, Boyce, Kalnins, Overpeck, and Haugland (2004) examined the combined and interactive effects of material deprivation and area deprivation on adolescent self-rated health. A descriptive correlational design with data from the World Health Organisation (WHO) Health Behaviour in School Aged Children survey (HBSC; 1997/1998) was used. This survey included a sample of adolescents (n=125,732) from 29 countries and regions. A further sample of 11-15 year olds (n=94,915) was extracted from the larger sample. Results indicated that self-rated health differed significantly between individuals, schools and

countries. Multilevel logistic regression showed that relationships between material deprivation and self-rated health were significantly reduced after taking into account psychosocial factors, health behaviours, and perceived affluence. Furthermore, an 11-year old student from a country with the highest area deprivation had a risk of self-rated poor health more than 3 times higher than students from the least materially deprived country. This risk for students from the most deprived countries was maintained after controlling for individual level of family affluence, health behaviours, parental support, and perceived affluence. Torsheim et al. (2004) concluded that the findings highlight the strong combined effects of material deprivation at individual, local, and national level on early adolescents' self-rated health. Furthermore, the authors concluded that social inequalities at the individual level were remarkably consistent across countries, which suggests that individual inequalities in adolescent health may be the result of processes that are relatively independent of the economic conditions in a country. The authors give the example of the Nordic countries which are historically known to be wealthy. Yet, material deprivation was just as strongly related to self-rated poor health in these countries. The study also identified some confounding factors (psychosocial, health behaviours, and perceived affluence), of the relationship between material deprivation and adolescent self-rated health. However, Torsheim et al. (2004) argue that these factors could also be described as potential mediators. In other words material deprivation may not directly cause self-rated poor health, but it may serve as a stratification mechanism for a series of processes that are of importance to health, including health behaviour and parental support. Torsheim et al. (2004) also recommended that future public health policy adopt a multi-level approach to tackle health inequalities in young people i.e. with individual, local, and national targets for intervention.

Weitof, Hjern, Batljan, and Vinnerljung (2008) examined how health and social outcomes among a national sample of Swedish children (n=1,196,257) related to parental disposable income and receipt of social assistance (from the National Board of Health and Welfare) using a longitudinal design. Results showed that children in families receiving long-term social assistance faced less satisfactory health and social outcomes than the population as a whole, and also than children from other low-income families. Weitof et al. (2008) conclude that growing up in a family on long-term social assistance can be viewed as a robust risk marker for compromised long-term development, at least in a Scandinavian context and almost regardless of measure of outcome. Hence, it was recommended that future policy focus on children and parents receiving long-term social assistance and offer them access to evidence-based prevention programs (e.g. in the areas of health, education, and skills training) targeting high-risk families. However, the study findings also point to value of providing those comprehensive vital supports to enable persons to access good quality training and well paid employment as required so that they can move away from dependence on social assistance.

...the results showed that increased physical exertion, low social support and irregular shift work associated with particular kinds of labour, affected the health outcomes of young workers...

Karmakar and Curtis Breslin (2008) explored the associations between sociodemographic, work and lifestyle factors in a large sample of Canadian workers aged between 20 and 29 years drawn from the Canadian Community Health Survey. Key findings indicated that the SES health gradient was evident in young adulthood and that job characteristics of those with lower education

attainment explained part of the educational inequalities observed in work-related injuries and to a lesser extent self-perceived health for young adult workers. For example, the results showed that increased physical exertion, low social support and irregular shift work associated with particular kinds of labour, affected the health outcomes of young workers (Karmakar and Curtis Breslin, 2008). The findings suggested that occupational health early in the health trajectory (young adulthood) is impacted by work factors related to lower levels of education attained.

Yoo, Slack, and Holl (2009) examined the relationship between material hardship reported by caregivers and caregiver's assessments of their children's overall health using a descriptive correlational design. Data from multiple waves of the Illinois Families Study on children aged 5-11 years (n=1073) was used. The sample consisted of mostly African American children with a mean age of 8.05 (SD=1.92). Results showed that caregivers' reports of food hardship were strongly associated with their assessments of their children's physical health. Yoo et al. (2009) also found the cumulative measure of material hardship to be inversely associated with ratings of children's health as excellent. The importance of developing and supporting programmes and policies that ensure access to better-quality food, higher quantities of food, and better living conditions for low-income children was proposed as a way of reducing health disparities for this population.

Strazdins, Shipley, Clements, O'Brien, and Broom (2010) investigated whether poor quality jobs could pose a health risk to employed parents' children in Australia. A nationally representative sample of 4-5 year old children and their families (n=2373 employed mothers; 3026 employed fathers), from the 2004 Growing Up in Australia data, was recruited. Results showed that when parents held poor quality jobs, their children showed more emotional and behavioural difficulties. These associations were independent of income, parent education, family structure, and work hours,

and were evident for both mothers' and fathers' jobs. Furthermore, the associations tended to be stronger for children in low-income households and lone-mother families. Strazdins et al. (2010) conclude that job quality may be another mechanism underlying the inter-generational transmission of health inequality.

Emerson, Llewellyn, Honey, and Kariuki (2012) determined the extent to which the lower well-being of young Australians with disabilities could be accounted for by increased rates of exposure to adversity and reduced access to personal, economic, social, and community resources. A secondary analysis of data extracted from Waves 1 (2001) to 8 (2008) of the annual longitudinal survey of Household Income and Labour Dynamics in Australia using a sample of young adults. Results showed that among younger adults in Australia, the association between disability and lower psychological wellbeing largely reflects their increased risk of exposure to adversity and reduced access to resources, rather than the presence of health conditions or impairments per se. The study indicates that public health interventions aimed at improving the well-being of young adults with a disability need to address the predominantly social determinants of well-being in this group.

The study indicates that public health interventions aimed at improving the well-being of young adults with a disability need to address the predominantly social determinants of well-being in this group.

IN SUMMARY, MATERIAL DEPRIVATION HAS BEEN SHOWN TO BE DETRIMENTAL TO CHILD AND ADOLESCENT HEALTH (BACKETT-MILBURN ET AL., 2003; KARMAKAR AND CURTIS BRESLIN, 2008; STRAZDINS ET AL., 2010; TORSHEIM ET AL., 2004; WEITOF ET AL., 2008; YOO ET AL., 2009). HOWEVER, COMPLEXITIES EXIST WITH REGARDS TO DETERMINING EXACTING CONTRIBUTION OF LEVEL AND TYPE OF JOB QUALITY, PARENTING STYLES AND THAT SIMPLE INCREASES IN ASSISTANCE AND WELFARE PAYMENTS MAY NOT BE ENOUGH ON THEIR OWN TO TACKLE HEALTH INEQUALITIES AT POPULATION, COMMUNITY AND FAMILY LEVELS. DIFFERENTIAL ACCESS TO SOCIAL AND CULTURAL CAPITAL IS IDENTIFIED LATER IN THE REVIEW AS AN IMPORTANT FACTOR IN EXPLAINING WHY INCOME TRANSFERS TO POORER FAMILIES MAY NOT DO ENOUGH ON THEIR OWN TO IMPACT ON POOR HEALTH OUTCOMES.

Family Structure

Kestilä, Koskinen, Martelin, Rahkonen, Pensola, Aro, and Aromaa (2005) assessed the role of family structure, parental education, and self-reported childhood adversities as determinants of different dimensions of health in a sample of young adults aged 18-39 years (n=3669) in Finland. A secondary aim was to identify the role of the respondent's own education as a modifier of the association between childhood living conditions and health. Results showed that parental education, problems in childhood, and the respondent's own education were independently related to self-rated health (SRH) and psychological distress. Furthermore, childhood conditions were strongly associated with poor SRH and psychological distress, but not as much with somatic morbidity. Results showed that males who had lived with only one parent during childhood were significantly more likely to report poor SRH than those who had lived with two parents. Yet, this result was not significant for females. Kestilä et al. (2005) concluded

that the impact of childhood living conditions on health varies according to the measure of health used. Secondly, the influence of past living circumstances on health and reporting of symptoms and problems varies between genders. Thirdly, early recognition of childhood adversities followed by relevant support measures may play an important role in preventing health problems in adulthood.

Bzostek and Beck (2011) examined the association between increasingly-complex patterns of family instability and physical health in early childhood (age 0-5 years) using longitudinal data about a cohort of children born in the US (n=4048). Three measures of physical health were used: whether the child was overweight or obese, whether the child had ever been diagnosed by a health professional as having asthma, and the mother's overall assessment of the child's health. Family instability was measured according to their living arrangements at birth using a combination of the mother's marital status and whether she was living with the child's biological father at that time.

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Results showed that health outcomes for children born to single mothers who later experience residential familial instability were not significantly different from outcomes for children living with single mothers in a stable relationship throughout their first 5 years. The only significant difference found was for children born to cohabiting parents who broke up by the time the child was 3 years old, was related to

higher rates of asthma and worse overall health at age 5. Bzostek and Beck (2011) concluded that the results generally support the hypothesis that chronic instability is associated with worse health. Further research is recommended to understand the association between family instability and child health in order to inform health policy. Similarly, Krueger, Hayward, Elo, and Franzini (2011) found that children living in family structures other than a married couple household had worse health than those living in married couple households. The sample consisted of white, black, and Hispanic children taken from the National Health Interview Survey which was conducted from 1972 to 2009. Results also showed substantial differences in family structure across race/ethnicity, and in the relationship between family structure and health, over time. However, not all family structures were equally disadvantageous across race/ethnic groups. A substantial share of the health disparities were explained by family level demographic, socio-economic, and health characteristics and Krueger et al. (2011) concluded that these variables drive disparities in the health implications of various family structures across race/ethnic groups. Kreuger et al. (2011) further suggest that health policies which provide support or financial resources to children, who live with grandparents when parents are absent, might be especially helpful for some of the least healthy children.

The sample consisted of white, black, and Hispanic children taken from the National Health Interview Survey which was conducted from 1972 to 2009.

IN SUMMARY, THE RESEARCH INDICATES THAT FAMILY INSTABILITY AT A YOUNG AGE IS ADVERSELY ASSOCIATED WITH HEALTH OUTCOMES FOR YOUNG CHILDREN (BZOSTEK AND BECK, 2011; KRUEGER, HAYWARD, ELO, AND FRANZINI, 2011), MORE SO FOR MALES THAN FEMALES (KESTILA ET AL., 2005). HOWEVER, CONSIDERATION MAY ALSO NEED TO BE GIVEN TO HOW CHANGES OF FAMILY STRUCTURES ARE MANAGED FOR CHILDREN IN RELATION TO THEIR HEALTH OUTCOMES. THIS NEEDS TO BE CONSIDERED IN THE CONTEXT OF SOCIAL CAPITAL.

Social Capital

Social capital is a concept that has gathered recent attention within the literature. Waterston et al. (2004) define it as a sense of belonging or a level of involvement in community affairs or to the quality of informal social supports in communities. Grineski (2009) explored the role of cultural and social capital in shaping parental experiences with children's health care, using open-ended interviews and participant observation. Social capital was defined according to Bourdieu (1993, p143) as 'contacts and group memberships which, through the accumulation of exchanges, obligations, and shared identities, provide actual or potential support and access to valued resources'. In other words it was said to refer to social connections and social power (i.e. the power of people in one's network). A US sample of parents of children (under age 14) with asthma (n=53) was recruited. Findings revealed that cultural capital helped parents solve problems and make informed healthcare decisions. Sources of cultural capital were said to include a college education, being born or raised in the US, and employment in the healthcare field. Cultural capital helped parents succeed by selecting the insurance plan that best met their children's needs, facilitating effective communication with providers, proactively engaging in decisions

about the child's treatment, accessing health care services, and providing 'know how' and resources to solve problems. Grineski (2009, p125) concludes that the importance of culture in parents' ability to 'play the game' of health care cannot be overestimated. Meanwhile, social capital was said to help parents acquire useful recommendations about providers and assisted them in meeting basic health needs. Key sources of social capital included relationships with doctors, school nurses, and friends. Social capital assisted parents by helping them acquire useful recommendations about which providers were the 'best' and by assisting them in meeting basic health needs (such as transportation assistance). Furthermore, abilities to harness cultural and social capital varied based on race, ethnicity, and social class with non-Hispanic white/affluent parents being most successful at deploying cultural and social resources. Grineski (2009) concludes that social, cultural and other types of capital play an important part in SES-based health inequalities and explain why simple increases in income or assistance do not resolve the problem of SES-based health inequalities.

Lida and Rozier (2013) examined the association between mother-perceived neighbourhood social capital and oral health status and dental care use in US children. A secondary analysis of data from the 2007 National Survey of Children's Health which included a sample of mothers of children (n=67388), was conducted. Mothers' perceived social capital was measured with a 4-item social capital index (SCI). Results showed that children of mothers with high and lower levels of social capital (15% and about 40% respectively) were more likely to forgo preventative dental visits than were children of mothers with the highest social capital. Mothers' with the lowest SCI were 79% more likely to report unmet dental care needs for their children than were mothers with highest SCI. Lida and Rozier (2013) suggest that current population-based oral health interventions designed to improve health care are generally targeted at individuals and rely heavily on the individual's rational decision-making and behaviour – at the expense of consideration of

broader contextual factors that may influence the performance and maintenance of such behaviours. Hence, they suggest future interventions should consider the contribution of social capital to oral health and related behaviours.

IN SUMMARY, ACCESS TO SOCIAL AND CULTURAL CAPITAL IS INCREASINGLY RECOGNISED AS PLAYING A PART IN SES BASED HEALTH INEQUALITIES. ACCESS TO PARTICULAR SOURCES OF SOCIAL AND CULTURAL CAPITAL, HAVE BEEN IDENTIFIED IN STUDIES AS IMPORTANT IN HELPING FAMILIES TO BETTER MEET THEIR HEALTHCARE NEEDS. WITH REGARDS TO ORAL HEALTH, LIDA AND ROZIER (2013) HIGHLIGHT THAT POPULATION-BASED HEALTH INTERVENTIONS NEED TO CONSIDER BROADER CONTEXTUAL FACTORS AND THE PART PLAYED BY SOCIAL CAPITAL, RATHER THAN INDIVIDUAL BEHAVIOURS ALONE, TO BE MORE EFFECTIVE.

- SES is established as a very reliable predictor of youth health disparities.
- Early interventions can improve the social circumstances and health of children.
- Links between parental education and child health are evident.
- Health and other social policies have to prioritise those who are more socially and economically disadvantaged in order to reduce health inequalities.
- Interventions need careful planning and ongoing evaluation to ensure they are serving the needs of socio-economically disadvantaged youth.
- Health promoting interventions have been shown to produce incremental improvements in poorer children's health.
- Knowledge about poor health outcomes and how these outcomes relate to geographic location have been shown to be useful to better locate interventions where they are most needed.

- Some young people have demonstrated considerable resilience when confronted with adverse health outcomes, thus mediating their very worst effects.
- Two key risk markers for less satisfactory social and health outcomes are longterm dependence on social assistance and chronic family instability experienced by children at a young age.
- Access to social and cultural capital has been acknowledged as playing a part in explaining SES based health inequalities.

International Country-level Research Welfare Regimes

Zambon, Boyce, Cois, Currie, Lemma, Dalmasso, Borraccino, and Cavallo (2006) examined whether different types of welfare status mediate the effect of socio-economic position on adolescents' (n=160,325) health in Israel, North America, and 32 European countries. Data were taken from the WHO Health Behaviour in School-aged Children (HBSC) study which included 11, 13, and 15 year old children. The Family Affluence Scale (FAS) was used to measure socio-economic status and health outcomes included self-reported health, well-being, health symptom load, and health behaviours (frequency of smoking, drinking alcohol, or engaging in physical activity). Each country was also classified based on their social welfare regime i.e. liberal, social democratic, conservative, Mediterranean, or post-communist. Results showed that FAS and health behaviours were significantly associated in only a few countries. However, the association between FAS and perceived health, well-being, and health symptoms were significant ($p < 0.01$) in almost all countries. Associations between socio-economic position and health outcomes were generally lower in countries with social democratic (e.g. Norway, Sweden, Austria) and conservative (e.g. Germany, France, Belgium) welfare regimes, and higher in those with liberal (e.g. the US, Canada,

the UK, Ireland), Mediterranean (e.g. Italy, Spain, Greece), and post-communist (e.g. Russia and Eastern European countries) welfare regimes. However, Ireland (classified as liberal), was identified as an exceptional case in its ranking for well-being and symptom outcomes. Zambon et al. (2006) alluded that Ireland is considered by some as more similar to the Mediterranean welfare system in that responsibility for needs fulfilment is based on the family-employment nexus. Zambon et al. (2006) concluded that this finding for Ireland was based on factors related to liberalised trade competition, resulting in a principle of compulsive subsidiarity by the state, rather than from private factors (i.e. redistributive functions performed by the state are delegated to the market or the family in Mediterranean welfare regimes). The authors further concluded that the type of welfare regime adopted by a country affects the strength of the association between absolute socio-economic position and health outcomes in adolescents. Furthermore, they concluded that social democratic and conservative welfare regimes rank lowest in the strength of this association followed by liberal and other regime types. The feasibility of a country changing their welfare regime is doubtful. However, Zambon et al. (2006) argue that an evaluation of social policies in terms of health inequalities could provide insight for future directions in policy development.

Similarly, Richter, Rathman, Nic Gabhainn, Zambon, Boyce, and Hurrelmann (2012) examined whether different welfare regimes are associated with health and health inequalities among adolescents. Data were collected from the HBSC study in 2006 which included children aged 11-15 years (n=141,091) from 29 European countries, as well as Canada, the US, and Israel. Countries were categorised into 4 regimes according to Ferrera's welfare typology (1996) i.e. Scandinavian, Bismarckian, Anglo-Saxon (Liberal), Southern and an additional fifth category Eastern European.

³In liberal welfare regimes, there is a political commitment to minimise the state's roles and responsibilities, to individual risks, and to promote market solutions (Zambon et al., 2006, p316).

Ireland was categorised as Liberal. Results showed that between 4 and 7% of the variation in both health outcomes is attributable to differences between countries. Compared to the Scandinavian regime, the Southern regime had lower odds ratios for self-rated health, which for health complaints the Southern and Eastern regime showed high odds ratios. The association between subjective health and welfare regime was largely unaffected by adjusting for individual socio-economic position. Grouping countries into welfare types contributes to explaining the variation of both health outcomes (self-rated health and health complaints) among countries. No clear regime-specific pattern was found for young people however. Socio-economic inequalities in health among adolescents are evident within all countries – no matter to which regime type they belong – the applied regime typology does not mirror the variation in health inequalities across Europe. Future research should focus on the explanation of the impact of welfare regimes on health and health inequalities. Richter et al (2012) recommend that improving health should continue to be an important public health strategy with emphasis on the youth population in all countries irrespective of welfare regime.

IN SUMMARY, THE WELFARE REGIME OF A COUNTRY CONTRIBUTES TO HEALTH OUTCOMES (ZAMBON ET AL., 2006). HOWEVER, NO CLEAR REGIME-SPECIFIC PATTERN WAS FOUND FOR YOUNG PEOPLE (RICHTER ET AL., 2012), INDICATING THAT PUBLIC HEALTH STRATEGIES IN COUNTRIES REQUIRE A FOCUS ON IMPROVING THE HEALTH OF THE YOUTH POPULATION REGARDLESS OF THEIR WELFARE REGIME TYPE.

Using ecological, cross-sectional studies comparing 23 rich countries and cross state comparisons within the United States, one study (Pickett and Wilkinson, 2007) found that many more indicators of child wellbeing were associated with income inequality or child relative poverty or both than with average incomes.

Fiscal Economy

Using ecological, cross-sectional studies comparing 23 rich countries and cross state comparisons within the United States, one study (Pickett and Wilkinson, 2007) found that many more indicators of child wellbeing were associated with income inequality or child relative poverty or both than with average incomes. Among the US states indicators were significantly worse in more unequal states with the exception of teenage birth rates and school dropout, which were lower in the richer states. The conclusion drawn was that improvements in child wellbeing in rich societies are possibly more contingent on reductions in inequality than on further economic growth (Pickett and Wilkinson, 2007). Holstein, Currie, Boyce, Damsgaard, Gobina, Kokonyei, Hetland, de Looze, Richter, Due, and the HBSC Social Inequalities Focus Group (2009) examined (i) socio-economic inequality in multiple health complaints among adolescents; (ii) whether the countries' absolute wealth and economic inequality was associated with symptom load among adolescents; and (iii) whether the countries' absolute wealth and economic inequality explained part of the individual level socio-economic variation in health complaints. The HBSC international study from 2005/06

provided the corpus of data analysed. This included a sample of young people (n=204,534) who attended general schools in three age groups: 11-, 13-, and 15-year olds in a random sample of schools or classes in each country i.e. cluster sampling. A sample of 11, 13, and 15 year old students (n=194, 353) from nationally random samples of schools in 37 countries in Europe (including Ireland) and North America was recruited. Participants were categorised into high (6-7 points), medium (4-5 points), and low (0-3 points) FAS. However, in the least wealthy countries this was not appropriate as a very high proportion of the population was in the low affluence category. Hence, an alternative categorisation went as follows: high (6-7 points), medium (3-5 points), and low (0-2 points). Results indicated that the odds of a high level of health complaints increased as family affluence decreased for the total population and this was significant for 27 of the 37 countries. Ireland was one of the countries in which the association was not significant. However, when the alternate categorisation was applied this relationship reached significance in the Irish population. This result is most likely due to the distribution of the Irish subjects in terms of FAS i.e. 23.4% were in the low group, 56.2% were in the medium group, and 20.5% were in the high group. The percentage in the low FAS group was much higher when compared with other countries of similar GNP and Gini coefficient e.g. Norway (3.9% in the low FAS group), United States (11.2% in the low FAS group), and the United Kingdom (13% in the low FAS group). Other findings revealed no significant interaction between GNP and family affluence on multiple complaints but the findings suggested that GNP may modify the association between family affluence and health complaints. Holstein et al. (2009) concluded that adverse socio-economic conditions in childhood, predict a high level of health problems in adult life. Furthermore, they argued that it is not easy to change the socio-economic circumstances of children, but it may be easier to change the mediators e.g. lack of physical activity, parental control, early

attachment and parenting. Future research exploring these factors as well as carefully designed intervention studies is recommended.

Powell-Jackson, Basu, Balabanova, McKee, and Stuckler (2011) tested the effects of growth and democratisation and their interaction with social inequalities using a descriptive correlational design. Data on child and maternal mortality rates for 192 countries covering the period 1970-2007, was used. Results showed a higher degree of social division, especially ethnic and linguistic fractionalisation (i.e. social stratification on ethnic and linguistic lines), was significantly associated with greater child and maternal mortality rates. High degrees of social division in the context of democratisation can, as noted in this source, strengthen the power of the dominant elite and ethnic groups in political decision-making, resulting in health and welfare policies that deprive minority groups. They further suggest that national health systems designed to respond to the needs of diverse ethnic and social groups are likely to lead to better health and reduce societal inequalities.

King, Harper, and Young (2013) assessed individual preferences for prioritising reductions in health and health care inequalities using a descriptive, correlational design. Data from the World Health Survey was used. The WHS is a cross-sectional survey administered in 70 countries (including Ireland) in 2002-03 to assess behavioural risk factors, mental health, chronic health conditions, and interactions with the health care system. A binary variable was created for one item on the survey: whether or not the respondent ranked minimising health inequalities as the first health system goal. The sample included any male or female adult aged 18 and above. Five countries were not included in the WHS: Australia, Brazil, Hungary, Turkey, and Zimbabwe. Results showed clear preference for prioritising overall improvement in population health first and fairness in financial contribution last. Individuals tended to prioritise goals related to overall improvement (improving health and health care responsiveness) over

those related to equity and fairness (minimising inequalities in health and responsiveness, and promoting fairness of financial contribution). There was variation across countries in the prioritisation of reducing health inequalities with it being higher in countries with higher GDP per capita, life expectancy, and equality in child mortality.

IN SUMMARY, WHILE BEING COGNISANT OF THE ADVERSE SOCIO-ECONOMIC CONDITIONS ON CHILD HEALTH, INFLUENCING INTERVENTIONS TO IMPROVE CHILD OUTCOMES INCLUDE POSITIVE PARENTING (HOLSTEIN ET AL., 2009). IN DEMOCRATIC SOCIETIES WHERE THERE ARE GREATER SOCIAL DIVISIONS, THIS CAN RESULT IN THE PURSUIT OF HEALTH AND WELFARE POLICIES THAT FURTHER DEPRIVE MINORITY GROUPS (POWELL-JACKSON ET AL., 2011). FURTHERMORE, THE PRIORITISATION OF REDUCING HEALTH INEQUALITIES VARIES BETWEEN COUNTRIES AND ACCORDING TO GDP, LIFE EXPECTANCY, AND EQUALITY IN CHILD MORTALITY (KING ET AL., 2013).

- While the welfare regime of a country has been found to contribute to health outcomes, socio-economic inequalities among young people are evident in countries regardless of different regime types.
- Public health strategies in all countries (regardless of their welfare regime type) need to retain a focus on youth health inequalities.
- In more socially divided societies, it can be more difficult to adopt policies favourable to the reduction of social and health inequalities.

COGNITION AND EDUCATION

While many studies draw attention to the relationship between poor education attainment and poor health, there are a number of studies which have sought to elaborate more precisely the causal pathways between education and health. Many of these studies put forward an argument that more needs to be known about these pathways in terms of devising policy interventions most likely to have a significant impact. For example, a study based in Britain by Chandola et al. (2006) which examined six possible causal pathways simultaneously with the help of longitudinal data from the National Child Development Study⁴. The study found that healthy lifestyles and a greater sense of control are very significant pathways in the relationship between education and health. Only a few health behaviours were examined (self-reported exercise, fruit consumption and smoking), but smoking in particular was a very strong pathway linking education with health.

Similarly, Walsemann et al.'s (2008) study examined the association between educational advantages in youth and health-induced work limitations in early to mid-adulthood. They analysed the National Longitudinal Survey of Youth data in the USA collected from 1979 up to 2002. It was a nationally representative survey of men and women (14-22 years) in 1979 and it included an oversample of racial and/or ethnic minorities. Results demonstrated that greater educational advantage in youth is associated with lower probabilities of health-induced work limitations in adulthood. Results also indicated that the health gap between those with greater versus fewer educational advantages in youth widens with age and that the magnitude of the racial health disparities over the life-course is modified by educational advantages. The results also showed that the number of educational advantages have cumulative rather than static effects. Indeed early educational experiences

⁴The NCDS involved an initial 1958 survey of a birth cohort and six further attempts (between 1965 and 1999) to trace all members of this birth cohort and to monitor their physical, educational and social development over time.

were also seen to influence health through multiple pathways rather than through their association with educational attainment. The authors argue that the study findings support their contention that starting school at an advantage is linked to a sequence of events thereon that promote additional advantages. The study's significance lies in its evaluation of education as a process rather than a static indicator of individual's socio-economic status. It is argued that other studies which only focus on standard of education attained fail to adequately take into account how educational content, experiences and opportunities in early life play their part in producing health disparities (Walsemann et. al., 2008).

Le et al. (2013) reported an inverse relationship between poor early life health and poor education attainment using three waves of US longitudinal data on children, adolescents and young adults (aged 5-24 years). Results indicated that poor general health status when young is associated with fewer years of completed schooling at follow up. Le et. al. (2013) concluded that such a result is important in explaining associations found in many studies between poor health and poor education levels found among adults.

In keeping with the life-course perspective, which attends to circumstances during childhood, in a study conducted by Ostberg and Modin (2008), peer status during school years provided the main interest. The study was rationalised with reference to the small number of studies which have looked at the importance of childhood peer relations as important for later adult life and health. The authors set about empirically investigating the relationship between peer status in childhood and health in mid-life to see if an association existed and if it did how it could best be explained. The data used came from the Aberdeen Children of the 1950's Cohort Study. A clear health gradient was found for both men and women with an increasingly greater risk of poor health, the lower the childhood peer status position.

The association seemed stronger for women than men and it was found that the associations found could not be explained by other factors such as socio-economic circumstances or differences in individual behaviour or cognitive score in childhood. Likewise, West et al. (2010) assessed the relative importance of school-based peer hierarchies and family SES for psychoneuroendocrine response (PRS), represented by cortisol level⁵. The data were derived from the 'Peers and Levels of Stress' (PaLS) study, a cross-sectional survey of 15 year olds in 2006 in schools situated in and around Glasgow. In addition to completing a questionnaire, being interviewed, having their height and weight recorded, the students in the sample studied, also provided two salivary cortisol samples. In terms of analysing the relationships between family SES, school-based social hierarchies and the PSR/ cortisol, social hierarchies were found to be a more important source of stress at the age of 15 than family SES, however measured.

A systematic review of cognitive behavioural interventions promoting mental health in students (11 years – 19 years) in schools was undertaken by Kavanagh et al. (2009). A meta-analysis of 17 high quality randomised controlled trials showed a reduction in symptoms of depression, which was generally short-term (no longer than three months). However, benefits lasting up to six months were found in interventions for students with clinical risk factors or with existing symptoms. The important finding for the purpose of this review was that the evidence though based on a small number of studies, did suggest that Cognitive Behavioural Therapy (CBT) mental health interventions are possibly less effective for children from low socio-economic backgrounds (Kavanagh et. al., 2009). Acknowledging that there may be a significant number of reasons for this, the authors also pointed out that children in lower SES families possibly also face higher levels of stressful events or adversity than their counterparts. The authors also

⁵The authors point out that one hypothesised mechanism linking social position/SES to health is 'stress' or more precisely the psychoneuroendocrine Response (PSR), which in this study is represented by salivary cortisol.

acknowledged that a major challenge in applying an equity lens when undertaking a meta-analysis such as theirs, is that the required socio-demographic data may not be reported in the primary studies reviewed, thus undermining the opportunity for better understanding the differential effects of interventions on different socio-economic groups (Kavanagh et. al., 2009).

IN SUMMARY, FEWER YEARS OF COMPLETED SCHOOLING WAS FOUND TO BE ASSOCIATED WITH POOR CHILD HEALTH (LE ET AL., 2013) AND FURTHERMORE, POOR CHILD HEALTH WAS FOUND TO BE ASSOCIATED WITH POOR CHILDHOOD PEER STATUS (OSTBERG AND MODIN, 2008; WEST ET AL., 2010). HOWEVER, AS A MEASURE OF SES, EDUCATION AS A PROCESS RATHER THAN AN ENTITY IS A MORE VALUABLE INDICATOR (WALSEMANN ET AL., 2008). IN ADDITION, CHANDOLA ET AL. (2006) FOUND A GREATER SENSE OF CONTROL TO BE A SIGNIFICANT MEDIATOR IN THE RELATIONSHIP BETWEEN EDUCATION AND HEALTH. AS AN INTERVENTION, CBT WAS FOUND TO BE LESS EFFECTIVE FOR CHILDREN FROM LOW SOCIO-ECONOMIC BACKGROUNDS (KAVANAGH ET AL., 2009). SEXUAL HEALTH ALSO NEEDS TO BE CONSIDERED IN THE CONTEXT OF CHILDHOOD AND ADOLESCENCE HEALTH INEQUALITIES

- While the link between poor educational attainment and health is well established, in an attempt to better understand this link, factors such as educational content, experiences and opportunities, school based peer relations and personal resources have all been identified as important in better elaborating the relationship between education and unequal health outcomes.

SOCIAL IDENTITIES

Sexual Minority Youth and Young Adult Populations

A number of studies reviewed have explored the health disparities, between the heterosexual population and other sexual minorities. The literature suggests that sexual minorities experience more mental ill-health than the heterosexual population and the studies involved enquiries into what factors explained these disparities. Previous research has been mainly based in the US context and predominantly pertains to mental health disparities. The minority stress perspective/hypothesis has been tested in a number of studies, which is understood in terms of how sexual minorities, because they live in a heteronormative society, experience greater exposure to stress mechanisms and have less psychological resources at their disposal. In one study, longitudinal mediation models were used to directly test sexual minority specific victimisation as a potential explanatory mechanism of the mental health disparities of sexual minority youth in the context of the US (Burton et al., 2013). One hundred and ninety seven persons (14 – 19 years, 70% female and 29% sexual minority) completed measures of sexual minority specific victimisation, depressive symptoms and suicidality at two points 6 months apart. Compared to heterosexual youth, sexual minority youth reported higher levels of sexual minority specific victimisation, depressive symptoms and suicidality. The study found support for the minority stress hypothesis that targeted harassment and victimisation are partly responsible for the higher levels of depressive symptoms and suicidality found in sexual minority youth. The effect was stronger for depressive symptoms than for suicidality. The authors of the study acknowledged McCormack's (2012) argument that homophobia is declining in significance in recent decades and indeed the critique of research, which by only focusing on the negative outcomes for sexual minority youth such as depression, suicidality and substance use, run

the risk of actually increasing self-destructive behaviours in this population (Savin-Williams, 2005). However, the evidence generated in the study was used to contend that even if there is a more accepting cultural climate, sexual minority youth are still at risk of being bullied, sexually abused, and experiencing depression, suicidality, substance use and school absence due to fear (Burton, et. al., 2013). In terms of future research, studying sources of resilience in a population such as sexual minority youth, which is at risk of victimisation was identified as a worthwhile project.

In another study, the analysis relied on data from a sample of Miami-Dade County residents transitioning into adulthood gathered for what was called the Transitions Study (Ueno, 2010). A range of possible mechanisms explaining mental health differences and drug use were simultaneously tested, including stress exposure, deficiency in psychological resources, self-exploratory attitudes and network members' drug use and permissiveness. Results showed that people with same-sex contact reported higher levels of both depressive symptoms and drug use and were less likely to graduate from high school. They also reported higher levels of stress exposure and lower levels of social support and psychological resources. Furthermore, people with same-sex contact reported stronger self-exploratory attitudes and were members of networks who used drugs frequently and were permissive of drug use. However, there were no differences in relationship status, major discrimination, friend support and optimism found between persons with and without same sex contact. Together a number of mechanisms tested (victimisation, discrimination, negative life events, chronic strains, social support and psychological resources) accounted for a large percentage of the gap between people with and without same sex contact, in terms of depressive symptoms unexplained by socio-demographic backgrounds. The gap in drug use could not be explained by the same processes, but was partially explained by

the strength in self-exploratory attitudes and the permissiveness of drug use in social networks important to persons with same sex contact (Ueno, 2010).

Similarly, findings of lower family connectedness as a protective resource reported by adolescent sexual minorities were tested in a sexual minority (LGB) young adult population (Needham and Austin, 2010). Data from wave 3 of a National Longitudinal Study of Adolescent Health were utilised. Lesbian and bisexual women reported lower levels of parental support than heterosexual women as did gay men when compared with bisexual and heterosexual men. Higher odds of suicidal thoughts and recent drug use were also recorded in the lesbian and bisexual population of women than their heterosexual counterparts and bisexual women also had higher odds of depressive symptoms and heavy drinking. Gay men also had higher odds of suicidal thoughts than heterosexual men. The differences in health outcomes for sexual minority women were much more significant when compared with heterosexual women, than they were for gay men when compared with their heterosexual peers. Some support was found for the hypothesis that differences in parental support help explain why LGB young adults have worse health-related outcomes than their peers (Needham and Austin, 2010).

Some women may experience same sex attraction but not identify as lesbian or bisexual or be categorised as such. Consequently these women are often excluded from sexual minority research and thus one study set out to ensure that these women were also included (Johns et. al., 2013). The relationship between sexual attraction, sexual identity and psychosocial wellbeing in a female-only subsample of a US national sample of emerging adults (18-24) was examined. Results indicated that sexual attraction was more predictive of women's psychosocial well-being as much or more than sexual identity measures because not all women who experience same

sex attraction identify as lesbian or bisexual. The conclusion drawn was that in a society where opposite sex attractions are privileged, ownership of same-sex attractions among women who identify as heterosexual, may be enough to compromise psychosocial wellbeing when examined in relation to reported experience of depressive symptoms, anxiety and self-esteem. Similarly women in the female attraction group reported lower levels of parental and peer support than women in the male attraction group, which is a finding consistent with studies of persons who identify as members of a sexual minority (Johns et. al., 2013).

IN SUMMARY, VICTIMISATION AND TARGETED HARASSMENT WERE FOUND TO BE ASSOCIATED WITH HIGHER LEVELS OF DEPRESSIVE SYMPTOMS AND SUICIDALITY IN SEXUAL MINORITY YOUTH (BURTON ET AL., 2013). SOME EVIDENCE INDICATES THAT THE DIFFERENCE IN LEVELS OF DEPRESSIVE SYMPTOMS AMONG SEXUAL MINORITY YOUTH AND HETEROSEXUAL YOUTH IS LINKED TO VICTIMISATION, DISCRIMINATION, NEGATIVE LIFE EVENTS, CHRONIC STRAINS, SOCIAL SUPPORT, AND PSYCHOLOGICAL RESOURCES (UENO, 2010). FURTHERMORE, THERE IS SOME EVIDENCE INDICATING THAT DIFFERENCES IN PARENTAL SUPPORT HELP TO EXPLAIN WHY SEXUAL MINORITY YOUTH HAVE WORSE HEALTH-RELATED OUTCOMES THAN THEIR PEERS (JOHNS ET AL., 2013; NEEDHAM AND AUSTIN, 2010).

- Interventions with a specific focus on building resilience within social support networks for minority youth, and initiatives reducing discrimination, can be expected to have a positive effect on youth mental health and well-being. Furthermore, such interventions need to be cognisant of race and ethnic status and how they interact with the health of young people.

Race/Ethnicity

The role of racism in children and adolescent health outcomes is also recognised in the literature (Hernandez, Montana, and Clarke, 2010). To fill a knowledge gap relating to the pathways contributing to child dental health disparities in the context of the US, Guarnizo-Herreno and Wehby (2012) measured racial/ ethnic inequalities in US children's dental health using data from the 2007 National Survey of Children's Health. Results revealed that Hispanic children had the poorest dental health followed by black and then white children, were explained with reference to factors which were socio-economic status, maternal health, age and marital status, neighbourhood safety and social capital and state of residence.

Lower maternal education and higher household poverty level were found to be the two most important and consistent factors explaining the disparities found in the study.

Lower maternal education and higher household poverty level were found to be the two most important and consistent factors explaining the disparities found in the study. The authors argued that it was indeed very evident from the results that the disparities found were socio-economically driven but that they were also amenable to policy interventions focused on household and neighbourhood levels. Similarly, Wen (2007) investigated the association between race/ethnicity and child health, and the role played by family structure, SES and health care factors among five major racial/ethnic groups in the US. Data from the 1999 National Survey of America's Families (NSAF), a national representative survey which included information on children aged 17 or under as provided by parents' reports, were used. The results overall showed that the white population enjoyed health advantage over all

the other racial/ethnic groups. Native American children showed the most striking disadvantage when compared with white children. A greater percentage of Asian children rather than white and black children lived in intact families. White and Asian children had the highest levels of family income, parental education and home ownership as well as private or employer insurance. By contrast, black, Hispanic and Native American groups on average had lower levels of family SES, with the Hispanic and Native American groups recorded as having the highest rates of no insurance. Family SES seemed to have stronger effects than parental education on children's health, particularly for the youngest age group studied. However, parental education emerged as an important protective factor for children in middle and older childhood. Family SES best explained some of the disparities experienced but not all, suggesting that race is not entirely eclipsed by family SES in the production of social inequalities in health. The lower rate of racial/ethnic disparity found in general health among children (0-17 years) in the US than in the older population, led the authors to suggest that the large disparities found in the adult population might best be explained by the cumulative effects of disadvantage experienced by minority groups over the life-course (Wen, 2007). More longitudinal research generating better knowledge as to how race/ethnicity, health and other social factors interact, associate and change over time was recommended.

White and Asian children had the highest levels of family income, parental education and home ownership as well as private or employer insurance.

Lynam and Cowley (2007) used qualitative data gathered from immigrant mothers and teens in Britain and Canada (London and Vancouver) to illustrate the ways in which marginalisation as a process of social location created conditions which contributed to the vulnerabilities of immigrants. They traced the ways in which relationships and the forces shaping them, influenced research participants' capacities to access and mobilise resources for health. For instance the data revealed how marginalisation is characterised by a sense of feeling overlooked, categorised or misrepresented. For example the negative impact of such messages as 'you don't belong' or 'you are not a person of value' help create the context of marginalisation experience by ethnic minorities. It is described as limiting opportunities for capacity building and for constraining the ways in which relationships are established. Lynam and Cowley (2007) argue that limited economic resources impacts on families' social networks with fewer opportunities to build capacity, which compounds the impact for ethnic minorities. They further argue that marginalisation has to be understood as a key social determinant of health (Lynam and Cowley, 2007).

A study in the US context sought to estimate the associations between ethnicity, SES and bicultural stress in a population of Latino and non-Latino European Americans using survey data gathered from middle school students (median age 14) (Romero, Martinez, and Carvajal, 2007). Bicultural stress was defined as the perception of stress due to everyday life stressors that result from navigating between more than one culture and the assessments include items relating to discrimination, negative stereotypes, intergenerational acculturation gaps and pressure to speak more than one language. As hypothesised, higher bicultural stress was consistently associated with more risk behaviour engagement and higher depressive symptoms. Romero et al. (2007) concluded that bicultural stress as defined in the study was an important underlying factor explaining health disparities in the US adolescent population.

In the Irish context, the aim of one piece of research, based on focus groups with members of the Travelling community was to explore the heightened drug activity within Traveller communities over time, which was once virtually non-existent (van Hout, 2011). It was argued that the traditional anti-drug Traveller culture had diminished over time. Given the extensive marginalisation and discrimination experienced by Irish Travellers in Irish society, it was contended that Traveller drug use may well over time replicate or exceed that of the settled population. In terms of priority in processing the research, van Hout (2011) noted that reduced opportunity to live the Traveller lifestyle in contemporary Irish society may well cause a disparity in health status by way of compromised physical and emotional health. Housing was identified as culturally alien to Travellers but site residency it was argued presented many challenges to Travellers including those related to access to health and other services. Coercive governmental measures to house Travellers and to situate them in marginalised areas exacerbated their drug related risk and at the same time undermined their resilience as extended Traveller families became fragmented and Traveller cultural norms threatened by the processes of assimilation. Lack of Traveller institutional trust because of their negative experiences was highlighted as a challenge to responding to this community's needs particularly where drugs are concerned. Furthermore a big paradigm shift away from sedentarist frameworks in policy making was advocated for if the Traveller community was to be protected from further fragmentation, dissipation of ethnicity and problematic drug use in Irish society. In this context also the distinct lack of Traveller advocacy in the National Drugs Strategy 2009-2016 was highlighted as lost opportunity (van Hout, 2011).

Primary language spoken at home for approximately 20% of the people living in the USA is not English, which can contribute to disparities in health and health care of adolescents. This

was the reference for the study undertaken by Lau et al., (2012) to examine disparities in medical and oral health status, access to care, and use of services in a nationally representative sample of adolescents (n=47,159) aged 10-17 years from non-English primary language (NEPL) homes. Bivariate and multivariable analyses were performed on the 2003 National Survey of Children's Health. Results showed that compared with adolescents from English primary-language homes, adolescents experienced many disparities, including being more likely to have suboptimal health, suboptimal dental condition, no health insurance, no personal doctor or nurse, problems obtaining speciality care, never having seen a dentist, and no preventative medical or dental visit in the past year. Lau et al. (2012) recommended the need for insurance coverage and health policy changes that increase healthcare provider access to help eliminate the barriers experienced by NEPL adolescents.

Primary language spoken at home for approximately 20% of the people living in the USA is not English, which can contribute to disparities in health and health care of adolescents.

Discrimination is acknowledged as a contribution factor to health inequalities for racial and minority groups, particularly with regards to physical and mental health issues. Discrimination experiences at young ages may have implications for longer term outcomes as adults. To explore this phenomenon, Bogart et al. (2013) conducted a descriptive quantitative study with minority groups in the USA examining the role of discrimination in preadolescent blacks' and Latinos' (mean age 11yrs) on adverse outcomes for health. Using data from the Healthy Passages, a 3-community study of 5119 fifth graders and their parents from 2004-

2006, multivariate regression analyses examined the relationships between discrimination and problem behaviours (PBs). The PBs assessed were aggression, aggressive and retaliatory behaviour, and delinquent behaviour. Findings revealed that PBs and perceived discrimination varied by race/ethnicity with black and Latino youths reporting more nonphysical aggression, aggressive or retaliatory behaviour than white youths. Black youths additionally showed higher levels of physical aggression and delinquency than did white youths. A higher percentage of black and Latino youth reported experiencing discrimination than did white youths. Although Latinos generally fared better than white youths did with similar socio-demographics, Latinos' discrimination experiences may have reduced advantage over white youths by more than a third, suggesting that discrimination can have an insidious impact, even when this minority group have better socio-demographically adjusted health outcomes than white young people. Reducing or eliminating discrimination could considerably reduce risk of problem behaviours and subsequent mental health issues among minority youths. Discrimination was also a factor identified by Romero et al. (2007) discussed previously. Interventions recommended included programmes that acknowledge the existence of discrimination and explore its implications to foster greater community, school and family social supports; however, there was no indicative detail of how these interventions may be operationalised.

A higher percentage of black and Latino youth reported experiencing discrimination than did white youths.

IN SUMMARY, RACIAL HEALTH DISPARITIES WERE FOUND TO BE SOCIO-ECONOMICALLY DRIVEN AND MIGHT BE BEST EXPLAINED BY THE CUMULATIVE EFFECTS OF DISADVANTAGE (E.G. THE LANGUAGE BARRIER) EXPERIENCED BY MINORITY GROUPS (BOGART ET AL., 2013; GUARNIZO-HERRENO AND WEHBY, 2012; LAU ET AL., 2013; LYNAM AND COWLEY, 2007; WEN, 2007). IN IRELAND, THE DISPARITY IN HEALTH STATUS OF THE TRAVELLER COMMUNITY COMPARED TO THE GENERAL POPULATION HAS BEEN EXPLAINED BY THE REDUCED OPPORTUNITY FOR TRAVELLERS TO LIVE THE TRAVELLER LIFESTYLE AND BY THE EXTENSIVE MARGINALISATION AND DISCRIMINATION EXPERIENCED BY THIS COMMUNITY. IN ADDITION, HIGHER BICULTURAL STRESS IS ASSOCIATED WITH MORE RISK BEHAVIOUR AND HIGHER DEPRESSIVE SYMPTOMS (ROMERO ET AL., 2007).

- Social and cultural marginalisation and discrimination such as that experienced by some groups in the population can reduce the opportunities they have at their disposal to experience good health.

HEALTH BEHAVIOURS

Obesity and Physical Activity

Poor health behaviours or lifestyle factors such as low level of physical activity, sedentary lifestyle (TV, gaming etc.), diet and smoking have long been established as key determinants of premature morbidity and mortality. The period of adolescence is critical in determining adult behaviour in relation to lifestyle choices as health inequalities in adult life are somewhat determined by early life circumstances (Graham and Power, 2004). Delva et al. (2006) conducted trend analyses on data from the Monitoring the Future Annual Surveys (MFAS) on a very large (N=42,000-49,000) national random sample of 8th, 10th and

12th grade students in the USA. Researchers specifically examined variables measuring weight, levels of physical exercise, frequency of eating breakfast, and average hours of watching TV, using self-complete multiple questionnaires. Findings revealed prevalence of overweight and engagement in less health enhancing behaviours among youth from racial/ethnic minorities, lower SES and students in higher grades. However, the trend data revealed diversity between and within groups. For example, the 11 and 17-year trend portrayed a continuously upward trend in the proportion of American youth who are overweight and a declining trend in healthy behaviours related to diet and exercise, particularly among males. Whereas the cross-sectional data consistently revealed a higher prevalence of overweight among black and Hispanic and low SES youth, which is related to the lower proportion of youths from these groups who regularly eat breakfast, exercise regularly and a higher proportion who watch a lot of TV. Trend analysis also found large differences in overweight between white adolescents and black and Hispanic adolescents, with Hispanic males and black females at particular risk. Furthermore, an inverse relationship was found between SES and percentage overweight with a sharper rise in overweight youth among low SES backgrounds. The latter results providing additional evidence that the burden of related diseases will fall on low SES populations.

Using data taken from the Health Behaviour and School aged Children (HBSC) 2005-2006 survey which includes 41 countries across Europe and North America, Haug et al. (2009) examined overweight and obesity of 11-15 year old school children and its relationship with demographic and lifestyle factors. Health behaviour variables included were similar to the previous study but also involved sedentary time spent on gaming as well as TV. Findings revealed that overweight prevalence was highest in the USA, and lowest in Latvia. In most countries it was more prevalent in boys than in girls and the trend since the previous survey of 2001-2002 showed a tendency

of increasing overweight, similar to Delva et al., (2006) study in the USA previously discussed. Overweight was consistently negatively associated with breakfast consumption and moderate to vigorous exercise. These findings are consistent with the previous study with regards to breakfast consumption, however no clear association was found between fruit and vegetable consumption and soft drinks and obesity and this may be related to the lack of details with regards to portion sizes. In most countries across all regions, about one third of the sample met the guideline of 60 minutes of moderate to vigorous physical activity on 5 or more days per week with the exception of Russia and Portugal. Furthermore, boys met this recommendation more often than girls. Being overweight was associated with an increase in viewing of TV and electronic gaming and low moderate vigorous exercise levels. Interestingly, girls were more likely to report this behaviour than boys in all countries with the exception of Bulgaria, Greece and Romania for TV and Canada and USA for computer use.

Being overweight was associated with an increase in viewing of TV and electronic gaming and low moderate vigorous exercise levels.

Similarly using self-rated health, Zajacova and Burgard (2010) examined the association between body mass index and self-rated health trajectories over 20 years using longitudinal data from NHANES/Epidemiologic Follow-up Study and double-trajectory latent growth models. Results revealed that High BMI in early adulthood and gaining more weight over time are both associated with a faster decline in health ratings. A small part of the weight-health association is due to socio demographic factors but not baseline health behaviours or medical conditions. Findings support the perspective of cumulative disadvantage documenting the increasing health

inequalities in a cohort of young adults. In summary, findings revealed from studies reviewed herein are consistent with each other and previous studies (Wang, 2001, Nelson et al., 2004), with regards to regular breakfast consumption and low levels of exercise associated with being overweight. They need to be considered in the context of study limitations, particularly the self-reporting measures of height and weight as it is well documented in the literature that this method is not always reliable (Brener et al., 2003).

Whitt-Glover, Taylor, Floyd, Yore, Yancey, and Matthews (2009), from their secondary analysis of accelerometer national data, reported that achievement of recommended levels of physical activity ranged across subgroups from 2% to 61%. Mean hours per day spent in sedentary behaviour ranged from 5.5 to 8.5. The largest disparities were by gender and age. The researchers recommend the need for theoretically sound research to elucidate which factors contributing to physical activity disparities are amenable to change. To eliminate health disparities, changes in policies that have an impact on physical activity may be necessary to promote physical activity among high-risk youth.

The researchers recommend the need for theoretically sound research to elucidate which factors contributing to physical activity disparities are amenable to change.

The measures used to determine health related behaviour outcomes are varied, particularly those measuring time-use behaviour. In an effort to address this limitation, Ferrar, Olds, Maher, and Gomersall (2012) used a software data collection method which allows participants to recall everything they did in a previous day to be recorded in time slices as fine as 5 minutes. Participants were a random sample (N= 2071) of

9-16 year old Australian children who provided household income data and four days use of time data. Results found that higher income participants spent significantly more time playing sport, including team sports, and in cognitively demanding behaviours such as school routine, doing homework, and playing music, than their low-income counterparts. Low-income participants spent significantly more time watching television and playing videogames. There were no differences in sleep or social interaction. Interventions recommended include subsidising sport membership, music lessons, and addressing transport barriers by facilitating extracurricular sporting activities on school sites.

IN SUMMARY, FINDINGS FROM THE ABOVE STUDIES REVEALED THAT REDUCED ENGAGEMENT IN PHYSICAL ACTIVITY RESULTS IN A TENDENCY OF INCREASING OVERWEIGHT WITH AN ASSOCIATED DECLINE IN HEALTH (DELVA ET AL., 2006; FERRAR ET AL., 2012; HAUG ET AL., 2009; WHITT-GLOVER ET AL., 2009; ZAJACOVA AND BURGARD, 2010).

Social and Contextual Factors

It is well established from empirical research that women tend to report higher levels of health complaints than men do, but few studies have included social and contextual factors which might help us better understand this. Thus, in attempt to address previous study methodological limitations, Torsheim et al., (2006) examined compositional and contextual sources of cross-national variation of gender differences in health complaints in young people. Using data from the HBSC 1997/1998 with a sample of 11-15 year olds (n=125,732) from 29 European and North American countries, researchers examined: (1) the level of gender differences across countries and across age groups; (2) the effects of individual level factors on cross national variation in gender differences and (3) relationships between macro-

level factors and gender differences. Data were collected using self-reported questionnaires. The Republic of Ireland was one of the countries included and it was categorised as having medium-high inequality. Multilevel logistic regression modelling analysis was used. Results revealed that although countries differed in the magnitude of gender differences, a robust pattern of increasing gender differences across age, (with 15 year old girls at increased risk for health complaints across all countries) was found. The most 'gendered' health complaints were headache and abdominal pains, in which mid-adolescent girls had 2.5 higher odds than boys of reporting recurrent patterns. In all countries girls showed a higher odds ratio for recurrent health complaints and the magnitude of gender differences differed across countries. Cross national variations in gender differences could occur as a result of such factors as social support, alcohol and smoking use, material conditions, and body image. However, having controlled for these variables, results indicated that the variation in gender differences was not due to these individual level factors. Gender differences in health complaints were stronger in countries with a high level of gender development⁶. The gender empowerment measure was associated with both boys and girls level of health complaints but not with gender difference. In countries where the gender distribution of political power and work was comparatively egalitarian, both boys and girls had lower levels of health complaints. Overall the findings suggest that gender related societal characteristics relate to the gender differences in health complaints in boys and girls.

Boardman and Alexander (2011) found that poor health behaviours (PHBs) have a moderating influence on the stress-mental health relationship and sought to examine the relationship between stress, health behaviours and mental health of black and white adolescents in the USA. They

conducted secondary data analysis from the National Longitudinal Study of Adolescent health (Add health Study) on non-Hispanic white and black adolescents. The Add health study examines health and health-related behaviours among a national representative sample of adolescents from 7th to 12th grade and followed them in three waves, 1995, 1996 and 2001. The key measures included: demographics, weight and height, depression, alcohol and smoking consumption, and stressful life events. Findings revealed that black adolescents have significantly higher risk of all levels of stress in comparison to white adolescents. The prevalence of depression was higher for black young people than white young people. The prevalence of smoking and drinking was higher for white youth compared with black youth but black youth were more likely to have increased risk of obesity and overall white youth had worse PHB profile compared with black youth. Stress exposure was found to be related to depression but no difference were found between black and white youth in relation to their poor health behaviour response to stressors. The findings contribute to the notion that PHB partially reduce the association between stress and depression for black young people but not for white young people. Important limitation was that other confounding variables were not considered such as socio-cultural e.g. general health, residential, work-related, social support and discrimination.

Caputo (2003) examined the relationship between self-efficacy (a sense of control over one's life) and perceived discrimination in addition to socio-economic status on health outcomes with a sub-sample of a US cohort of youth (N=969, aged 14-21 years). Statistical analyses revealed that when controlling for a variety of social characteristics and personal attributes, only a sense of control over one's life affected mental health status, while SES over the life- course affected only

⁶ The gender development index focuses on achievements in areas of education, health and income.

physical health. These findings reaffirm the need for professionals to continue to work with models of care that stress the self-determination and empowerment of individuals that enables them to enhance their own social functioning and improve conditions within their communities.

Risk taking in adolescents and elevated rates of delinquency may adversely influence low expectations for the future. Examining this phenomenon, McDade et al. (2011) using data from the Add Health study (a national longitudinal study of adolescent health based on a nationally representative sample of students) found that adolescents who rated their chances of attending college smoked fewer cigarettes and exercised more in young adulthood. Furthermore, parental education was a significant predictor of perceived life chances as well as health behaviours but for each outcome the effects of perceived life chances were independent of and frequently stronger than parental education. These findings indicate that perceived life chances in adolescence play an important role in establishing individual trajectories of health and thus interventions supporting endeavours in this regard need to be considered.

Also examining risk and health behaviours with adolescents, Allen et al. (2007) surveyed Asian and Latino adolescents aged 12-17 years (n=5801) using the data from the 2001 California Health Interview Survey. Outcome variables assessed included levels of physical activity, sunscreen, bicycle helmet use time spent watching TV and dietary habits. Findings revealed that behavioural disparities existed across the generations. With the exception of first-generation Asians preventive health behaviours either improved or remained better than white adolescents with each generation, whereas, Latino adolescents demonstrated generally worse health behaviours than white adolescents and in the case of nutrition, a worsening trend across generations. The identification of increasing disparities for Latinos for dietary behaviours in particular suggested that targeted interventions might be more beneficial.

IN SUMMARY, SEVERAL CONTEXTUAL FACTORS SUCH AS GENDER AND RACE, APPEAR TO IMPACT ON RISK FOR HEALTH COMPLAINTS (BOARDMAN AND ALEXANDER, 2011; TORSHEIM ET AL., 2006). FOR ADOLESCENTS, HAVING A SENSE OF CONTROL OVER ONE'S LIFE AND PERCEIVING ONE'S LIFE CHANCES IN POSITIVE TERMS ARE CORRELATED WITH GOOD MENTAL HEALTH STATUS (CAPUTO, 2003; MCDADE ET AL., 2011).

- Social and context specific factors can provide important insights into differential health experiences and outcomes for groups in the population.

Findings revealed that behavioural disparities existed across the generations. With the exception of first-generation Asians preventive health behaviours either improved or remained better than white adolescents with each generation, whereas, Latino adolescents demonstrated generally worse health behaviours than white adolescents and in the case of nutrition, a worsening trend across generations.

PHYSICAL AND EMOTIONAL HEALTH

Oral Health

Changes to social and economic policy in New Zealand in the early 1990's saw an increase in poverty, social exclusion and alienation among disadvantaged households. In an attempt to examine the effects of these changes on the health of children, Thomson, Williams, Dennison, and Peacock (2002) undertook secondary analysis of the dental caries data from the School Dental Service in the greater Wellington area from 1995-2000. The purpose was to test the hypothesis that the 1990-91 legal and policy changes in New Zealand (i.e. cuts to social welfare benefits and law creating labour flexibility in favour of employers) contributed to a subsequent increase in socio-economic and ethnic inequalities in the dental caries experience. Using logistic analyses, findings revealed that ethnic and socio-economic differences in caries prevalence and severity were substantial and persistent. Where caries severity was concerned, the oral health of Maori children deteriorated in comparison to their European counterparts over the five year observation period. These findings suggest that the changes to policy which generated greater inequalities were associated with an apparent widening in caries severity for Maori children and with possible implications for their longer term health outcomes.

Castaneda, Carrion, Kline, and Tyson (2010) conducted qualitative ethnographic research with dental care providers (n=19) and Mexican migrant workers (n=48) exploring the unmet dental health needs of children in the US. Results indicated that some typical factors associated with poor oral health outcomes, such as low dental health literacy did not apply to this sample of participants. They reported good oral health literacy especially with good daily brushing. However, they also reported that attendance for dental care results in loss of earnings for the day's work missed and thus access was an issue. Access for children with Medicaid

insurance was also problematic as some providers of care were inactive thus reducing the availability of dental care within their region. The findings, specific to children whose services are provided through Medicaid, require improvement to the current system by removing obstacles for dentists to treat low-income children; and innovative models to provide comprehensive care and increase the number of providers.

TO SUMMARISE, A VARIETY OF FACTORS IMPACT ON THE ORAL HEALTH OUTCOMES OF CHILDREN INCLUDING DENTAL HEALTH LITERACY AND PROBLEMS WITH ACCESS (CASTANEDA ET AL., 2010). FURTHERMORE, MACRO CHANGES IN SOCIAL AND ECONOMIC POLICY CAN AFFECT THE ORAL HEALTH OF CHILDREN AND HAVE LONG-TERM HEALTH IMPLICATIONS (THOMSON ET AL., 2002).

Long-Term Illness and Disability

The period of transition from child to adolescent according to West and Sweeting (2004) involves a process of equalisation i.e. moving from health inequality to relative equality. In testing this hypothesis, West and Sweeting (2004) undertook a descriptive correlational study to investigate equalisation of health in child-youth transition. Data were derived from the West of Scotland 11 to 16 cohort followed from later childhood (aged 11) through early childhood (aged 13) to mid adolescence (aged 15). Self-completed questionnaires measuring physical health status (longstanding illness); health state (physical and malaise symptoms and accidents/injuries); health potential (height), and socio-economic status were analysed. Results showed very little evidence of socio economic status differences in limiting longstanding illness at any age for both sexes, while self-rated health exhibited some differentiation. In contrast, among males evidence of equalisation was found for both physical and malaise symptoms and among females

equalisation was confined to physical symptoms. The conclusion drawn by the researchers was that SES was not as influential at this period (11-16 years) as first hypothesised and the considerable limitation of the descriptive nature of the study design cautions the generalisability of the findings.

Examining the relationship between the burden of chronic infections and SES in US children was the focus of a study using data from the Third National and Nutrition Examination Survey (NHANES) (Dowd et al., 2009). Outcome measures assessed included socio demographics, individual infections (e.g. helicobacter pylori, hepatitis A and B), height, asthma with children aged 6-16 years from non-Hispanic black, Mexican-American groups. Findings revealed a higher burden of infection was associated with lower height-for-age as well as increased likelihood of asthma, lower family income and lower parental education. Children with lower family income, lower parental education and non-white race/ethnicity had higher likelihood of infection with several individual pathogens as well as overall burden of infection. These findings suggest that a high lifetime of burden of chronic infections may lead to overall earlier development of chronic disease and mortality. Thus early childhood interventions to address the social distribution of these infections are necessary to reduce and eliminate their combined burden later in life.

The Healthy People (HP) Framework in the USA is a strategy for achieving national goals for the health and well-being of all Americans. One of the goals is a commitment to addressing health inequalities, including those specific to children with special care needs. It was from this premise that Ghandour et al (2013) compared estimates for children with and without special health care needs (SHCN) at 2 time periods for HP 2010 objectives selected according to key indicators. Data were obtained from the 2003 and 2007 National Survey of Children's Health (NSCH). Variables assessed included physical activity, overweight and obesity, mental health, injury, violence, environmental quality,

immunisation and access to health care. Results reported that children with SHCN fared worse than children without SHCN with respect to physical activity, obesity, living with someone who uses tobacco, past-month with depressive symptoms, and past year emergency department visits for injuries. However they fared better on measures of current insurance and having a personal health care provider. Ghandour et al. (2013) indicated that these findings suggest the need for continuing monitoring of and programmatic focus for children with SHCN both as a population with unique needs and as a growing proportion of the paediatric population.

IN SUMMARY, THERE IS SOME EVIDENCE TO SUPPORT THE PROCESS OF EQUALISATION (I.E. MOVING FROM HEALTH INEQUALITY TO RELATIVE EQUALITY) DURING THE TRANSITION FROM CHILDHOOD TO ADOLESCENCE AND THIS IS MORE PROMINENT AMONG MALES THAN FEMALES (WEST AND SWEETING, 2004). IN ADDITION, IT WAS FOUND THAT CHILDREN WITH A HIGHER LIKELIHOOD OF INFECTION MAY DEVELOP CHRONIC DISEASE EARLIER (DOWD ET AL., 2009) AND CHILDREN WITH SPECIAL HEALTH-CARE NEEDS WERE MORE LIKELY TO FARE WORSE THAN CHILDREN WITHOUT THESE NEEDS WHERE A RANGE OF HEALTH MEASURES WERE CONCERNED (GHANDOUR ET AL., 2013).

Smoking Status

Smoking is the leading cause of preventable death globally and in the early 2000s. Given the links between health and relative income status, and multiple stressors that are frequently experienced by those on lower incomes, smoking may be seen as a coping mechanism, which in turn is related to chronic health conditions such as cardiovascular disease. It is with these complex associations that Li and Guindon (2013) examined data from the Global Youth Tobacco Surveys of students aged 13-15 (n=169,283) from 63 low- and middle-income countries. The researchers examined the relationship between income, income inequality

and current smoking. Results revealed a significant positive association between levels of income and youth smoking. They found that a 10% increase in Gross Domestic Product per capita increases the odds of being a current smoker by at least 2.5%, and potentially considerably more. Furthermore, youth from countries with more unequal distributions of income tend to have higher odds of engagement in smoking. The researchers suggested that the findings reveal the significant underlying contribution of smoking to the social inequalities in health observed for these low income/middle income countries.

To investigate racial/ethnic and place of birth patterns of smoking among US adolescents and young adults, Wade et al. (2013) analysed data from the 2006 tobacco use Supplement to the Current Population Survey (n=44,202). Statistical analyses revealed that US born non-Hispanic white adolescents and young adults particularly men report smoking more than individuals in other racial/ethnic/nativity groups. There was great variance within the data for some groups of young women, particularly with regards to their race/ethnicity and their birth place and the length of time living in the US. The findings thus highlight the importance of the need to consider all of these factors in strategies and developed interventions to reduce overall US smoking prevalence and subsequent contribution to health disparities. Interventions that are developed need to be evidence based, policy driven and take cognisance of implementation at the various levels of individuals, families, communities and populations.

TO SUMMARISE, SMOKING STATUS WAS SHOWN TO BE LINKED TO GDP PER CAPITA OF A COUNTRY AND YOUTH FROM COUNTRIES WITH MORE UNEQUAL DISTRIBUTIONS OF INCOME WERE MORE LIKELY TO BE CURRENTLY SMOKING (LI AND GUINDON, 2013). FURTHERMORE, SMOKING STATUS WAS ALSO FOUND TO BE INFLUENCED BY GENDER, RACE AND ETHNICITY (WADE ET AL., 2013).

The researchers examined the relationship between income, income inequality and current smoking. Results revealed a significant positive association between levels of income and youth smoking. They found that a 10% increase in Gross Domestic Product per capita increases the odds of being a current smoker by at least 2.5%, and potentially considerably more. Furthermore, youth from countries with more unequal distributions of income tend to have higher odds of engagement in smoking.

Part A

Brief Summary

To conclude, the studies reviewed in Part A have identified several factors that contribute to the persistence of health inequalities including SES. Researchers interested in investigating the link between SES and health, have to carefully consider the measures used and their impact on the results. In terms of tackling health inequalities, it is clear that early intervention is emphasised. Furthermore, interventions have to consider social circumstances, gender and other differences in order to maximise the effect on health inequalities. The need for longitudinal research investigating the relationships between SES, cumulative disadvantage and health outcomes from a life-course perspective has been highlighted in the literature (Seabrook and Avison, 2012; Singh-Manoux, 2005). With reference to this, the Institute of Public Health (IPH, 2009) (see Part C) in the Irish context has also highlighted the challenges involved in organising evidence on education and health inequalities into a meaningful and actionable policy format, based on a life-course perspective. Moreover, Pavalko and Caputo (2013) concluded that a much more thorough understanding of the dynamic processes that link socio-economic conditions and health is needed and the life-course perspective can help to achieve this. The need to gain a more thorough understanding of the effects of childhood disadvantage on adult health, and differences across genders and racial/ethnic groups, has been emphasised (Palloni and Milesi, 2006; Pavalko and Caputo, 2013). In tackling health inequalities, one needs to be cognisant of the very significant connections between health, social, and economic inequalities.



PART B:

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POLICY, INTERVENTIONS & PRACTICE INITIATIVES ADDRESSING YOUTH HEALTH INEQUALITIES

Part B: POLICY, INTERVENTIONS & PRACTICE INITIATIVES ADDRESSING YOUTH HEALTH INEQUALITIES

This section of the review is structured according to Whitehead's typology of actions to reduce health inequalities (2007). Hence, there are four main categories of interventions:

- Strengthening Individuals
- Strengthening Communities
- Improving Living and Working Conditions
- Promoting Healthy Macro-Policies.

The review is structured in accordance with these categories but includes subcategories where appropriate.

STRENGTHENING INDIVIDUALS

According to Whitehead (2007) these interventions utilise person-based strategies and consider the cause of inequalities to be a perceived personal deficit in some respect e.g. a deficiency in an individual's knowledge, beliefs, self-esteem, practical competence in life skills, or powerlessness.

Educational and School-Based Interventions

Generally it is accepted in the majority of research studies reviewed that the best approach to tackling health disparities is to at best eliminate or at least reduce social and economic inequalities. Some European countries have been strongly associated with interventions designed to mitigate the negative effects of low socio-economic status on children's health. In the US context however, it is argued that public health became increasingly neglected over the course of

the 20th century (Brosco, 2012) and that there is little appetite for policies designed to significantly redistribute income towards the less well-off sections of society (Low et al, 2005). In this context policies designed to enhance educational opportunity and performance are considered more popular politically and worthy of pursuit (Low et al., 2005). Therefore the case has been made based on the strong associations found between education and health, to pursue policy aimed at better linking early childcare with education and parental training, so as to ameliorate the uneven distribution of educational attainment and health disparities linked to socio-economic position in the United States (Low et al., 2005). This policy is specifically about extending and integrating universal education and care to the born child and having the required inbuilt parental education to support this. Intervening in the very early years it is argued helps predict later success in school and this in turn can positively impact the relationship between education attainment and good health status (Low, et al., 2005).

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McAllister, Wilson, Green, and Baldwin (2005) explored the experiences regarding children's school readiness of low-income families (n=150). The results highlighted the importance of listening to parents with young children to understand their own perspectives on school-readiness. McAllister et al. (2005) conclude that this is especially important for minority families and low-income families of all ethnicities. In Walsemann et al's (2008) study, which highlighted that differential

access to educational advantages during youth contributes to persisting health disparities in adulthood, strategies designed to equalise access to education and policies aimed at equalising resources across the schooling system were identified as being good for education but also possibly for public health. In a Canadian study focused on lower educational attainment, job characteristics and health outcomes in a young adult worker population, it was suggested that to prevent poor health outcomes in the young adult working population in lower manual, sales and service occupations and to offset poor health in this population as they age, interventions designed to improve physical work environments and to enhance their social supports, as well as to reduce opportunity for workplace hazards should be a priority.

Based on a meta-analysis of Cognitive Behavioural Therapy interventions designed to promote mental health in a student population (11 – 19 years) the conclusions drawn pointed to the need to work with young people to develop longer (10 or more sessions), universal and targeted school based CBT type mental health interventions to better guarantee their effectiveness (Kavanagh et. al., 2009). The findings of case studies of two schools in Spain with significant immigrant populations of low socio-economic status, prompted the authors (Flecha et. al., 2011) to argue that health literacy approaches which are community based, involve a shared dialogue and a bottom up rather than top down approach are much more likely to work for users of health services but can also make health services more responsive to the needs of users as articulated by them. Furthermore, the potential of such health literacy interventions to extend beyond primary schools to day care centres and other facilities in very poor areas was also underlined in this study (Flecha et al. 2011).

In Britain provision of free and healthy schools meals has a long policy history in attempting to offset the worst effects of health inequalities and poor nutrition experienced by children (Pike and

Colquhoun, 2009). An ethnographic evaluative study was undertaken of the 'Eat Well Do Well' three year programme in Kings-ton-upon-Hull UK, which was identified by the authors as an innovative scheme providing free, healthy food to all primary school children. It was argued that universal provision of free healthy school meals potentially impacts upon the health gradient by improving nutrition across the population and by removing the barriers which prevent those experiencing the worst health outcomes from taking up free school meal provision. While the school meals served were the same and schools were very similar, the authors sought to explain the very different rates in schools of school dinner uptake. They argued that it was the differences in the dining experience in terms of temporal, aesthetic, social and spatial features which proved significant in explaining this different rate of uptake. For instance in one school, the 'whole school' approach adopted to the programme, the positive spatial organisation of the dining room, its aesthetic appeal and the atmosphere cultivated were all viewed as important in the high take up of school meals.

Cohen and Syme (2013) reviewed evidence from studies of early childhood, kindergarten through to 12th grade, and higher education to identify which components of educational policies and programs are essential for good health outcomes. Five potential pathways between health and education are identified: empowerment, knowledge, health behaviours, development and ageing, adult socio-economic position/social status. Cohen and Syme (2013) recommend further longitudinal research to identify what costs or benefits educational policies (e.g. length of school year and school day) and programs have over the life-course. It was also concluded that evaluations of the impact of education and educational empowerment programs on health need to be conducted.

- There is a strong case made in the literature in favour of early years' interventions to address child and health inequalities.

Primary Care Based Interventions

The authors make a case for attending to the 'spatial imagination' when using settings of importance to public health and health promotion activity. In the US context, the Health Care Home Model/Medical Home is an initiative by which patient and family level care at the point of delivery is perceived as contributing to improving access to care, reducing health disparities, increasing preventive service delivery and improving chronic disease management. In an article which acknowledges its positive features and effectiveness as well as its limitations, it is reported that the model which evidently originated in paediatrics was seen to have applicability across the life span (Grant and Greene, 2012). Basically it seeks to provide access to a range of multi-disciplinary health care providers at one primary care site and to provide care which is distinctly patient centred. Key positive benefits of the model, as they relate to poorer children and young people, include much better access to high quality care typically less available to poorer people by the removal of key barriers which stand in the way of access for low income groups (e.g. extended operating hours, integration of specialist services at the primary care site, provision of same day appointments with different health providers at the same site). Other positive features include preventive screening, enhanced receipt of immunisation, consistency and continuity of care and better care co-ordination for children with special health care needs. The efficacy of the model has also been demonstrated in outcome studies of children with asthma and it is also credited with improving the school participation and quality of life of such children (Grant and Greene, 2012).

Health Literacy Interventions

Based on data collected in two Spanish schools (which was part of a larger project involving six case studies of schools in different European countries where there was a concentration of minority background children or low socio-economic status), the effectiveness or otherwise of health literacy as a strategy designed to combat social and health inequalities was scrutinised (Flecha, et. al., 2011). The findings suggested that Roma and immigrant families were improving their health literacy through these kinds of school initiatives, were incorporating healthier habits in their daily lives and were displaying greater confidence in terms of accessing health services. The beneficial learning gleaned from such initiatives for both service users and providers was emphasised.

Looked-After Children and Young-People

Everson-Hock, Jones, Guillaume et al. (2011) conducted a systematic review to synthesis the evidence on the effectiveness of transition support services (TSSs) that are delivered towards the end of care for looked after young people (LAYP)⁷. Findings revealed that LAYP who received TSSs were more likely to complete compulsory education with formal qualifications, be in current employment, be living independently and were less likely to be young parents. It is clear that TSSs are very important and effective for the looked after population of young people.

⁷TSSs can also be called Aftercare, Continuing Care, or Through Care and refer to a range of supports for young people in care including: financial, accommodation, training and education, advice and information supports, practical supports such as cooking skills, budgeting etc., emotional support, and mentoring (Barnardos, 2012).

STRENGTHENING COMMUNITIES

According to Whitehead (2007) this category of intervention considers the cause of inequalities as related to greater social exclusion/isolation and powerlessness in hard-pressed communities.

Cultural Interventions and Harnessing Social Capital

Findings of lower levels of family support reported by sexual minorities when compared with their heterosexual counterparts have been shown to explain in part why sexual minorities tend to have worse health-related outcomes than their heterosexual counterparts. These findings have led to calls for interventions by agencies working with LGB adolescents and young adults toward strengthening these relationships where possible (Needham and Austin, 2010; Johns, et. al., 2013). Researchers focused on testing and confirming the sexual minority stress perspective/hypothesis, have used their findings to argue that public policy initiatives designed to reduce bullying and hate crimes are needed in society on the basis that reduced victimisation can have a very significant impact on the health and well-being of sexual minority young people (Burton, et. al. 2013). Based on findings indicating the part played by bicultural stressors in explaining risk behaviours and health disparities among US adolescents, interventions designed to improve intergroup relations in multi-ethnic youth contexts were advocated as well as interventions designed to address bicultural stress and potential coping processes in youth health promotion in mixed communities (Romero et. al., 2007). In terms of pointing out the importance of marginalisation as a key social determinant of health and with reference to the reported experiences in a qualitative study of first-generation migrant teenage girls and their mothers in Britain and Canada, the authors of this article argued for the increased mobilisation of policies designed to foster inclusion, promote greater diversity in workplaces and professions and to underscore rights of citizenship. They

argue that such policies are required to challenge marginalisation as a practice of social location based on categorical representation of groups in the population such as immigrants (Cowley and Lynam, 2007). McManus and Savage (2010) reviewed cultural perspectives of interventions for ethnic minority children, adolescents, and their families in the management of diabetes or the management of asthma. They concluded that there has been little effort to develop cultural interventions for ethnic groups and more work is needed to identify what elements of cultural interventions are most effective in achieving positive health outcomes for children, adolescents, and their families.

The potential of capacity-building interventions based on social capital were advocated in one article reviewed (Dominguez and Arford, 2010), on the basis that they can assist public health practitioners working with low-income communities in the US context, to reduce health disparities, improve well-being and decrease inequalities. For instance it was argued that if public health workers had knowledge of persons' social networks which influenced their health related attitudes and behaviours either positively or negatively, they could seek to diversify or strengthen such social networks to provide people with greater opportunity and support to live a healthy life. The community youth development model of intervention was detailed, which requires social service organisations to organise around promoting human and social capital growth of youth in low-income areas. Such an intervention it was argued had long-term health effects by fostering self-efficacy, self-esteem and positive peer network involvement for at-risk young people. One such example was a Youth Empowerment and Support Programme implemented by health professionals and designed to prevent drug use, which used such a model of intervention to successfully increase young people's reported levels of self-esteem, body image, social skills, attitudes against under-age drug use and involvement in social networks and

mentoring relationships. Another such example was Latino Health Access where health professionals trained young people serve as community leaders identifying the problems in their communities and reaching out to other young people and adults to develop community based solutions to these problems. Initiated also by health care providers, the Riverside Youth Violence Prevention Board was set up with the long term goal to prevent neighbourhood violence by creating and sustaining social relationships and increasing neighbourhood collective efficacy. All of the models of intervention described were designed to inspire public health workers to create change by using interventions based on social capital and social networks, on the basis that good social relationships are vital to good health (Dominguez and Arford, 2010).

Healthy Start Intervention – Eliminating Perinatal Health Disparities

Ley, Copeland, and Flint (2011) evaluate the Healthy Start Initiative from the perspectives of consumers (n=202). In 1991, the US federal Maternal and Child Health Bureau developed the Healthy Start Initiative as a comprehensive community-based program to eliminate high rates of poor pregnancy outcomes among women of colour. The common principles underlying the initiative are innovations in service delivery, community commitment and involvement, personal responsibility, integration of health and social services, multi-agency participation, increased access to health care services, and public education. The provision of adequate prenatal care, promotion of positive prenatal health behaviours, and the reduction of barriers to access are some of the issues addressed by this initiative. Ley et al. (2011) used a survey questionnaire to assess; use of Healthy Start project services and satisfaction with services; use of referrals and satisfaction; benefits of Healthy Start (open-ended); referral of others to Healthy Start; and reasons for referral to Healthy Start. Results showed that the majority of participants were satisfied with the services included in the initiative. The process

by which support services were provided was reported as the primary benefit of the programme. Participants also reported feeling empowered from the practical knowledge they acquired in the programme. Ley et al. (2011) concluded that community-based health interventions produce secondary effects (e.g. referrals, spread of knowledge through the community, increased trust of healthcare providers) that may not be immediately realised but are evident over time and are much greater than the objective results of reduction of infant mortality.

Sexuality Education Interventions

Starting from the premise that abstinence-only programmes of sex education or fear based approaches and one way communication of information about sexuality are ineffective, Mareques and Ressa (2013) in a feature article, highlight how these are still the predominant forms of sex education available in US schools over the last two decades. Calling for a more comprehensive sex education for young people than that characteristically on offer in the US, Mareques and Ressa (2013) describe in detail the Sexuality Education Initiative for Los Angeles started by Planned Parenthood, which involves a 12 session classroom sexuality education curriculum for students, workshops for parents, a peer advocacy training programme and access to sexual health services. It is guided by a rights-based framework, focused on asserting students' right to health care, education, protection, dignity and privacy. Its strengths are outlined in terms of its strong evidence base, its attention to gender power dynamics; its contextualisation in terms of its attention to sexual attitudes and behaviours in their broader social and cultural contexts and finally its strong rights based framework which sees young people as rights holders. Promoting this as a model of good practice, the authors hope that more educational programmes for teenagers into the future will question assumptions about gender and sexuality and promote a more respectful and accepting environment for the safe expression of diverse sexual identities.

Akintobi, Trotter, Evans, et al. (2011) describe the evaluation of a community campus intervention targeted at sexual health disparities among African Americans. The 2 HYPE Abstinence Club (2 HYPE A Club) is a comprehensive approach that targets the whole adolescent and acknowledges that sexual education cannot be separated from fostering stress management skills, addressing self perceptions, and changing attitudes regarding delayed gratification for longer-term life success. Yet, the overarching aims of the programme are to promote abstinence until marriage to reduce teen pregnancy and reduce the number of adolescents who engage in premarital sexual activity. The programme was assessed using a survey and focus groups. Akintobi et al. (2011) say that early impact results are promising as they showed significant increases in understanding the definition of abstinence, viewing abstinence as a choice after sexual activity, and positioning abstinence as 100% effective protection from the consequences of premarital sex. However, considering the focus of these results is on promoting abstinence, the actual effectiveness of this programme on reducing sexual health inequalities, is questionable. Blanco, Lindsay, Ojeda, and Zuniga (2011) evaluated a 5-day peer-led, community-based HIV prevention intervention among at-risk youth aged 12-22 years old (n=201). Results showed that all participants had improved sexual health knowledge and intention and ability to practice safe sex post intervention. However, black participants had less improvement than white participants in their intention to use condoms and HIV knowledge. Blanco et al. (2011) concluded that youth-serving interventions for youths from various ethno-racial groups need to be culturally specific to be effective.

IMPROVING LIVING AND WORKING CONDITIONS

The USA Head Start early childhood intervention programmes is one of the best known internationally and its overall aim is to promote children's physical, social and cognitive development and health. Gray and Francis (2007) undertook a comprehensive narrative review of Head Start to examine the impact, quality-improvement and programme objectives to inform the further expansion of the Sure Start programme in the UK. With regards to health inequalities, findings revealed that early childhood interventions can make a significant difference to the lives of children living in poverty. The better outcomes were in areas such as parent-child relationships, cognitive, emotional and academic measures in childhood. Long-term benefits in later life included: participation with the labour force; reduced welfare dependency; higher income and reduced criminal activity. Furthermore, the evidence revealed that the programmes were cost effective and an efficient use of public funds. Nevertheless, the researchers made a number of recommendations regarding the organisation, administration and funding of the programme to reduce the concerns about its quality and effectiveness. In the UK, Higgs (2011) claimed that minority ethnic children's needs are not met by health programmes (such as the Healthy Child programme) as these programmes fail to properly consider issues of race and diversity. These groups are under-represented in child and adolescent mental health services yet there is over-representation of black and minority ethnic people in detention under mental health legislation. Therefore it seems prudent to ensure that interventions are designed taking cognisance of race and ethnicity thus addressing specific needs in addressing health inequalities. Another policy consideration with regards to population health was highlighted by Hallfors et al (2007) following their analysis of data from the National Longitudinal Study of 18-26 year old non-Hispanic, black and white participants.

Their recommendation in using a population focus intervention was based on their conclusion that black young adults are at higher risk of STD and HIV even when their behaviour is deemed by the authors to be normative rather than risky. This is because of the elevated infection prevalence of HIV and STD among the black community and individual interventions would be ineffective in addressing a population public health concern.

PROMOTING HEALTHY MACRO-POLICIES

Tackling Socio-Economic Inequalities Directly or Indirectly

Reviewing the health policies pursued by the Labour Government in Britain in the period 1997-2001, Bywaters and McLeod (2001) in their review article focused on three key aspects of the emphasis put on social service departments (SSDs), in health promotion and tackling health inequality, which was a new policy orientation. Specifically they examined the drive towards organisational fusion between the elements of the National Health Service and the SSDs, the mechanisms for conjoint funding of health and social services and finally the focus on tackling health inequalities by combating social inequalities at both national and local levels. The measures taken as a result of the new policy orientation, it was argued by the authors, could at best only ameliorate social inequalities underpinning health inequalities and to a very limited degree. Despite the remit given to SSDs to address health inequalities alongside the NHS, there was little by way of evidence of working projects or initiatives being taken with a strong health inequality focus or work representing a significant new departure for SSDs. Bywaters and McLeod (2001) also stated that the restructuring of the NHS/SSD interface resulted in some benefits for service users including vulnerable children. Yet, significant problems still existed in terms of the fusion of services which would require substantial changes to SSD policy and practice.

- The causes of social and health inequalities are seen in Part A of this review, to be complicated, multiple and interconnected, but interventions reviewed in Part B show that these are rarely interconnected, across all sectors and levels of intervention, when Whitehead's (2007) typology is utilised. Therefore, as highlighted by Whitehead (2007, 473-478), it is very difficult to be confident as to what combination of actions is best to pursue to reduce health inequalities in any given context because 'the science in this field is far from answering that question'.

The measures taken as a result of the new policy orientation, it was argued by the authors, could at best only ameliorate social inequalities underpinning health inequalities and to a very limited degree.

PART C:

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KEY POLICY REPORTS

Part c: KEY POLICY REPORTS

In the UK, the Marmot Review (Marmot Review Team, 2010), which is widely cited in the literature, aimed to identify the evidence most relevant to underpinning future policy and action in terms of health inequalities. The review highlighted the link between health inequalities and social or economic inequalities. Although factors such as genetic makeup, unhealthy behaviour, and difficulties in access to medical care are important in terms of health, it was noted that health inequalities cannot be explained by these factors alone. The key findings of the review speak to a broader perspective of fairness and social justice. The review also recommends a 'proportionate universalism' approach to tackle the social gradient in health. In other words, actions must be universal, but with a scale and intensity that is proportionate to the level of disadvantage. Greater intensity may be required for those with greater social and economic disadvantage. It is recommended in the review that action on health inequalities occurs across all the social determinants of health. A key message of the review is that action needs to involve all central and local government departments as well as the third and private sectors. Furthermore, the reduction of health inequalities was deemed to be vital for the economy and the creation of a sustainable future. The review set out six key areas for governmental action on policy to improve health equity:

- 1 Giving every child the best start in life
- 2 Enabling all children, young people and adults to maximise their capabilities and have control over their lives
- 3 Creating fair employment and good work for all
- 4 Ensuring a healthy standard of living for all
- 5 Creating and developing sustainable places and communities
- 6 Strengthening the role and impact of ill-health prevention.

It was noted in this review that the earlier interventions are implemented, the better, as later interventions are considerably less effective where good early foundations are lacking. Furthermore, the review emphasised the importance of sustaining commitment to children and young people throughout the years of education in order to tackle health inequalities.

In an *Irish Times* interview (Cullen, 2013) Sir Michael Marmot (Chair of the Independent Review Body) rejected what he called the personal responsibility arguments pertaining to people's ill-health, arguing that it is poverty and low incomes that can make it most difficult for people to make the 'right' decisions about their health. He also pointed out that the evidence shows that the causes of inequalities in health are better explained by people's living conditions in a society rather than by unequal access to health care. As he noted, the countries with the most generous social welfare systems have better health equality because of the positive impact on child poverty. With reference to the British context, he lamented social and economic policies being pursued which were burdensome for the poorest sections of society but welcomed a White Paper, locating public health with local government and the introduction of a statutory duty on the part of the health secretary to reduce health inequality (Cullen, 2013). An Institute of Health Equity was established in University College London to build on the Marmot Review. It produces reports, develops indicators for monitoring health inequalities and provides summer schools on the social determinants of health. Recent reports have focused on the role health professionals can play in working for health equity (UCL Institute of Health Equity, 2013), the social determinants of mental health (UCL Institute of Health Equity, 2014) and actions needed in the city of London to address the potential of welfare cuts and recession to exacerbate health inequalities (UCL Institute of Health Equity, 2012). The website of the Institute provides a considerable repository of resources internally and externally produced, for

those seeking to access the evidence base needed to inform policy and practice to address health inequalities.

In May 2013, the British Medical Association's report *Growing Up in the UK: Ensuring a Healthy Future for Our Children* (BMA, 2013) set out an ambitious agenda for improving child health and reducing inequalities. Central to its message was stronger advocacy on behalf of children from persons involved in their care and better representation of the views of children and families. Reflecting on the lack of any significant progress in child health since the BMA's 1999 report, the high persisting rate of child poverty was identified as the main issue. Predicting that governmental action impacting negatively on family benefits would increase child poverty in Britain in the near future, professional bodies including doctors were called on, to lobby for action to reduce the impact of benefit reform on children and to advocate for a minimum family income for healthy living. A life-course approach to child health was advocated focusing on such issues as promoting good maternal nutrition, making outdoor spaces more accessible and safe, discouraging car use and changing the food environment. Relying on a social capital perspective, the provision of networks of support for children and adults who care for them were recommended. For children, who have complex needs arising from disabilities, emotional and behavioural problems or who are maltreated, integrated and co-ordinated working from health and social care agencies were considered necessary but presented as an ongoing challenge. Urgent action to improve the evidence base underpinning both universal

and targeted interventions was emphasised as certain government initiatives (e.g. Change4life and Healthy Start)⁸ were being shown to be only partially effective or only effective with some groups in the population. At the same time it was argued, interventions demonstrating some positive results were in danger due to staffing and service shortages (e.g. Sure Start)⁹ (Baird et. al., 2013). Towards establishing a better connection between public health and social science and towards shifting the focus from individual to structural issues for the purpose of intervening, the British Academy (2014) brought together a group of experts in the social sciences to write a proposal focusing on one issue and one intervention that could reduce health inequalities and which could be adopted by local authorities as well as health and wellbeing boards in the British context. Most relevant for this review are recommendations to;

- (a) Adopt a living wage policy towards addressing income inequality
- (b) Focus on early childhood interventions
- (c) Reduce 30mph speed limits to 20mph ones
- (d) Take a 'health first' approach to worklessness as demonstrated in a County Durham Worklessness and Health Model (see Warren et. al., 2014)
- (e) Use a form of participatory budgeting to make decisions on public health priorities and interventions
- (f) Better utilise further and adult education to reducing social inequalities in health
- (g) Improve the employment conditions of public sector workers
- (h) Make good use of evidence of cost effectiveness before choosing between competing interventions to reduce health inequalities.

⁸Change 4 Life is a public health programme in Britain, tackling the causes of obesity and Healthy Start is a UK wide voucher and vitamin coupon scheme for poor pregnant women and low income families with children under four, designed to improve their health and wellbeing.
⁹Sure Start is a British Government led initiative in disadvantaged areas, similar to Headstart in the US, which provides family health, early years care and education as well as a range of other supports, including quick and easy referral to services. It is targeted at low income families with children under four.

KEY EUROPEAN INITIATIVES

Following up on the commitments made by Member States at the Fifth Ministerial Conference on Environment and Health in Parma, Italy (2010), the World Health Organisation Regional Office for Europe carried out a baseline assessment of the magnitude of environmental health inequality in the European Region based on a core set of 14 inequality indicators. The main findings of the assessment report indicate that socio-economic and demographic inequalities in risk exposure are present in all countries and need to be tackled throughout the region. However, the report also demonstrates that each country has a specific portfolio of inequalities, documenting the need for country-specific inequality assessments and tailored interventions on the national priorities. However, the report noted that data to quantify the environmental health inequality situation are not abundant, making comprehensive assessments difficult at both national and international levels.

The 2011 Rio Political Declaration committed all World Health Organisation (WHO) member states to take action to reduce health inequities. In recognition of such health inequities persisting across and between countries in the EU region, a review of such inequities¹⁰ was commissioned by the WHO (World Health Organisation, 2013) to support the development of the new European policy framework for health and well-being, Health 2020 (UCL Institute of Health Equity, 2013). This review was built on global evidence and it recommended policies needed to reduce health inequities and narrow the health divide across countries. To achieve greater equity, action was recommended on the social determinants of health across the life-course and but also in the wider social and economic spheres towards achieving greater equity and protecting future generations. Informed by this review, *Health 2020*

(WHO, 2013) sets out four priority areas for action to tackle health inequities and to improve health and wellbeing across and within the EU;

- 1 Investing in health through a life-course approach and empowering people
- 2 Tackling Europe's major health challenges; non-communicable and communicable diseases
- 3 Strengthening people-centred health systems, public health capacity and emergency preparedness, surveillance and response
- 4 Creating resilient communities and supportive environments.

Pursing a common purpose and sharing the responsibility through partnerships at the different levels is advocated in Health 2020 as the best way forward to progress the priorities identified in the framework. It is presented as a 'living guide' and one flexible enough to inform the different countries' policies and strategies at different levels.

The WHO report (2014) *Health for the World's Adolescents*, while not directly focused on health inequalities, acknowledges that adolescents (10-19 year olds) need specific attention as distinct from children and adults. It sets out a case for services to move beyond a concentration on sexual health to encompass a fuller range of services as required by adolescents. The report also points out that further disaggregation of health information management systems by age and sex is required in many contexts to provide for precision planning and better monitoring of progress in addressing adolescent health needs. The report is intended to provide a stronger focus and structure for policies and programmes directed at adolescents and youth through governments and other actors. Most relevant to the Irish context, are findings that road traffic injuries are the number one cause of adolescent deaths globally and the

¹⁰Inequities rather than inequalities deliberately chosen word to reflect that these are unavoidable and unjust.

number two cause of illness and disability; that depression is the number one cause of illness and disability, that suicide ranks number three among the causes of death. Trends in adolescent health related behaviours which are improving were noted (e.g. cigarette smoking) but the finding that in some countries as many as one in three adolescents are obese, was also noted in the report.

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The European Portal for Action on Health Inequalities provides country-specific information and data on health inequalities. According to this source, addressing health inequalities is not as high on the political agenda in Ireland as in other countries due to the economic crisis. However, positive attempts to explicitly address health inequalities is found in initiatives identified such as providing free medical care to the elderly, providing free access to general practitioners, and planning universal health insurance. The Department of Health is identified as responsible for taking forward initiatives in this area and the key actors in the Republic of Ireland working on health inequality issues are identified as being the Government of Ireland (Department of Health & Children), the Institute of Public Health in Ireland (IPH), and the Health Services Executive. Furthermore, it is pointed out that only isolated cross-sectoral collaborations exist. This echoes Harvey's observation in his analysis of Irish health system, that the NGO sector has a very limited role in terms of health policy decision making in a system which is heavily centralised (Harvey, 2007).

Other European work includes Equity Action and the Work Package 6 (WP6; October 2013) entitled 'Developing an active scientific and technical network'. Equity Action is the EU funded Joint Action on Health Inequalities. The programme focuses on developing capability across Member States with a particular focus on developing knowledge for action on health inequalities, supporting the engagement of Member States, regions and other stakeholders in action to tackle socio-economic health inequalities, and share learning between member states and other actors. The aim of WP6 is to facilitate the transfer of scientific and technical knowledge and evidence to policy makers within the context of the Equity Action project. The focus is on intersectoral action to promote health equity and evidence on the effectiveness of action on the social determinants of health inequalities. The key focus of WP6 includes:

- The translation of scientific evidence into practical information that is of practical use to policy makers (e.g. EU expert groups, national ministries)
- The production of short reports or fact sheets. These fact sheets will provide an overview of knowledge gained about the health impact of actions on certain social health determinant as well as the socio-economic distribution of the health effects
- The development of a European research agenda on the effectiveness of intersectoral action on the social determinants of health inequalities.

KEY IRISH ACTORS AND POLICY REPORTS ON HEALTH INEQUALITIES IN IRELAND

In 2001 a publication (Barry et. al., 2001) entitled *Inequalities in Health in Ireland – Hard Facts* provided a set of data which confirmed key health inequalities in Irish society and it found at the time that single males in Dublin city had the worst health of all groups in the state. Strong connections were found between SES and the incidence of psychiatric conditions and unskilled male workers were identified as a group eight times more likely to die from an accidental cause than their counterparts in professional jobs. The study also provided some insight into how geographical location and health status interact, as medium sized towns seemed to have high rates of heart disease and cancer and a very strong correlation was found between treatment for drug misuse and living in an area of high socio-economic deprivation in Dublin. The study also drew attention to the lack of good quality data in the Irish context to inform policy and practice and called for much improved health information and more research to investigate what was still unknown about health inequalities in Ireland.

In 2001, a new health strategy entitled *Quality and Fairness A Health System for You* (DoHC, 2001) was introduced, which was built on a number of principles, one of which was equity. Apart from clarifying eligibility for health and personal social services, it also set out to broaden the scope of eligibility so that for instance more persons on low incomes could obtain medical cards and that priority would be given to families and children with disabilities. In terms of specific health inequalities, the National Anti-Poverty Strategy (Government of Ireland, 1997) was emphasised as were targets for the reduction of health inequalities. Initiatives to eliminate the barriers for disadvantaged groups to achieve healthier lifestyles were to be developed and

expanded. Homeless people, Travellers, drug misusers, asylum seekers and refugees as well as prisoners were all identified as groups requiring measures to improve their health and wellbeing (Department of Health and Children, 2001). However, the passing of legislation (Health Act 2006) provided for the further extension of privatisation in health care provision. As evidence accumulated pointing to the continuity of health inequalities at the same time as a two-tiered system was become more entrenched, questions were increasingly asked about the Government's commitment to the 2001 health strategy and indeed the revised anti-poverty strategy *Building an Inclusive Society* (Office for Social Inclusion, 2002). This strategy also promised measures to narrow gaps in health outcomes between rich and poor, to reduce gaps in premature mortality and low birth weight between highest and lowest socio-economic groups and to reduce the gap in life expectancy between Travellers and the wider population. Though the 2001 health strategy used the words 'evidence based', 'population health', 'equity', 'people-centred' and 'health and social gain', there was little evidence according to Byers (2009) that these concepts gained purchase in the implementation of policy and planning in Irish health care. *The National Action Plan for Social Inclusion 2007-2016* (Government of Ireland, 2007) reasserted the government's commitment to reduce poverty for groups across the lifecycle and for persons with disabilities. It promised delivery of the Community Adolescent Mental Health Services (CAMHS) and the reduction of cancer inequities. Promoting health and providing support for refugees, migrants and Travellers was also part of the strategy adopted to fight poverty. One analysis of Irish government action plans against poverty and social exclusion suggests that selective priority actions within a context that defers to economic interests are unlikely to resolve the deep seated structural features of Irish society that reproduce inequalities (Martin, 2010). In addition, it stated that austerity measures are likely to mean that social progress will stagnate, unless there is a sea change in culture, politics,

economy and society based on political values that embody social justice (Martin, 2010). As noted by Burke (2010) the inherent inequality in the Irish health system was permitted to flourish during the economic boom years. One of the great scandals identified by Burke (2010) is that the government ‘... failed to introduce universal access to health care on the basis of medical need, not ability to pay’. She has also argued that ‘... the great disgrace of bust would be to run down the services’ that have been built up and that ‘cutting health and social care services now costs more in the short and long term, economically but more vitally in terms of people’s health, well-being and quality of life’. Over the last number of years discrete health policies have been developed which also include a health inequality focus such as the *HSE Framework for Action on obesity 2008-2012* (HSE, 2010) the *National Men’s Health Policy 2008-2013* (Department of Health and Children, 2009), *A Strategy for Cancer Control in Ireland* (Department of Health and Children, 2006), *A Vision for Change*, *Mental Health Policy* (Department of Health and Children, 2006), *Obesity, The Policy Challenges* (Department of Health and Children, 2005) and *Traveller Health: A National Strategy 2002-2005* (Department of Health and Children, 2002).

In 2013, the Irish government launched *Healthy Ireland, a Framework for Improved Health and Wellbeing 2013-2025* (Department of Health, 2013). This report acknowledges that health and wellbeing are not evenly distributed across Irish society and identifies the reduction of health inequalities as one of the primary future health goals. In order to achieve the goal of reducing health inequality, the report states that there needs to be a broad focus on addressing the wider social determinants of health – the circumstances in which people are born, grow, live, work and age – to create economic, social, cultural and physical environments that foster healthy living. The Healthy Ireland framework focuses on adopting a community-based approach and empowering individuals as well as communities to improve

and take responsibility for their own health and wellbeing. In terms of health inequalities and young people, the report states that the most effective time to intervene in terms of reducing inequalities and improving health and wellbeing outcomes is before birth and in early childhood. As noted in the report, age-related chronic diseases have their origins in early life experiences and the determinants of positive ageing also extend beyond health and personal social services to include socio-economic, environmental and other social policy factors. A truly systematic, life-course approach to healthy ageing starts at birth it is stated and therefore the need to prioritise early intervention is iterated. Targeted, multi-sectoral interventions aimed at key risk groups in the population are advocated. Two actions are proposed within the report in terms of health inequalities: in Theme 5 of the framework (Research and Evidence) a research project on health inequalities and poverty is proposed; and in Theme 6 (Monitoring, Reporting, and Evaluating) the development of appropriate indicators of health inequalities is proposed. At the time of writing this review, a steering group has been established, a National Plan for Physical Activity has been developed, and a communications campaign to address childhood obesity has been launched.

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The establishment first of an Office of the Minister for Children and Youth Affairs (OMCYA) and subsequently the Department of Children and Youth Affairs (DCYA) in Ireland can be seen as a significant development in the infrastructure related to children's well-being. As highlighted by the Institute of Public Health (IPH, 2009), the formation of such a high-level interdepartmental organisational structure for children has contributed positively to the provision of resources for research on children's lives (Growing Up in Ireland). The integration of research and policy as well the establishment of local level implementation and policy structures specific to children. Since 2006 the DCYA has produced four *State of the Nation's Children* (Department of Health and Children, 2006b, 2008a, 2010 and Department of Children and Youth Affairs, 2012) reports based on data collected and research conducted. These describe the lives of children in Ireland, track some changes over time and provide a benchmark on progress in particular areas of children's lives in Ireland relative to other contexts. Indicator areas tend to be broadly disaggregated in relation to geography, gender, age and time but not all are, according to social class.

In 2011, the DCYA produced the *National Strategy for Research and Data on Children's Lives 2011-2016*. It identified 8 action areas to fulfil 5 research objectives, which related to the need to develop a

more comprehensive and coherent understanding of children's lives; the need for better research capacity in this field and an improved research infrastructure; better monitoring and evaluation of interventions at local and national levels and stronger support for research and data use within policy and practice settings. Many of the developments as well as the challenges relating to data collection and research on children in Ireland were highlighted in this document. The need for further harmonisation of data collection was emphasised as was the need for better data linkage as well as the requirement to be able to disaggregate data by key population groups (e.g. children). Better mining strategies and secondary analysis of existing datasets to access more information about children was also recommended. One of the developments as a result of the strategy was the establishment in 2012 of the DCYA inventory of data sources on children's lives which has three main categories of data; administrative data sources (e.g. the National Perinatal Recording System, the National Registry of Deliberate Self-Harm); cross-sectional surveys and censuses (e.g. HBSC, WHO Childhood Obesity Surveillance Initiative); longitudinal surveys (Growing Up In Ireland Study, Lifeways Study, CSO Quarterly National Household Survey). Though some progress has been made in implementing the actions identified in the strategy, a key recommendation relating to the introduction of a personal health record to track children's health status and health outcomes over time has not been rolled out due to the absence of a HSE comprehensive child health information system (DCYA, 2013).

Better Outcomes Brighter Futures, the National Policy Framework for Children and Young People 2014-2020 is the Department of Children and Youth Affairs' (2014) current policy relating to children and young people. The evidence base for the different objectives of this policy is to a significant extent informed by Growing Up in Ireland data. Most relevant to this review are its undertakings to tackle inequalities in health

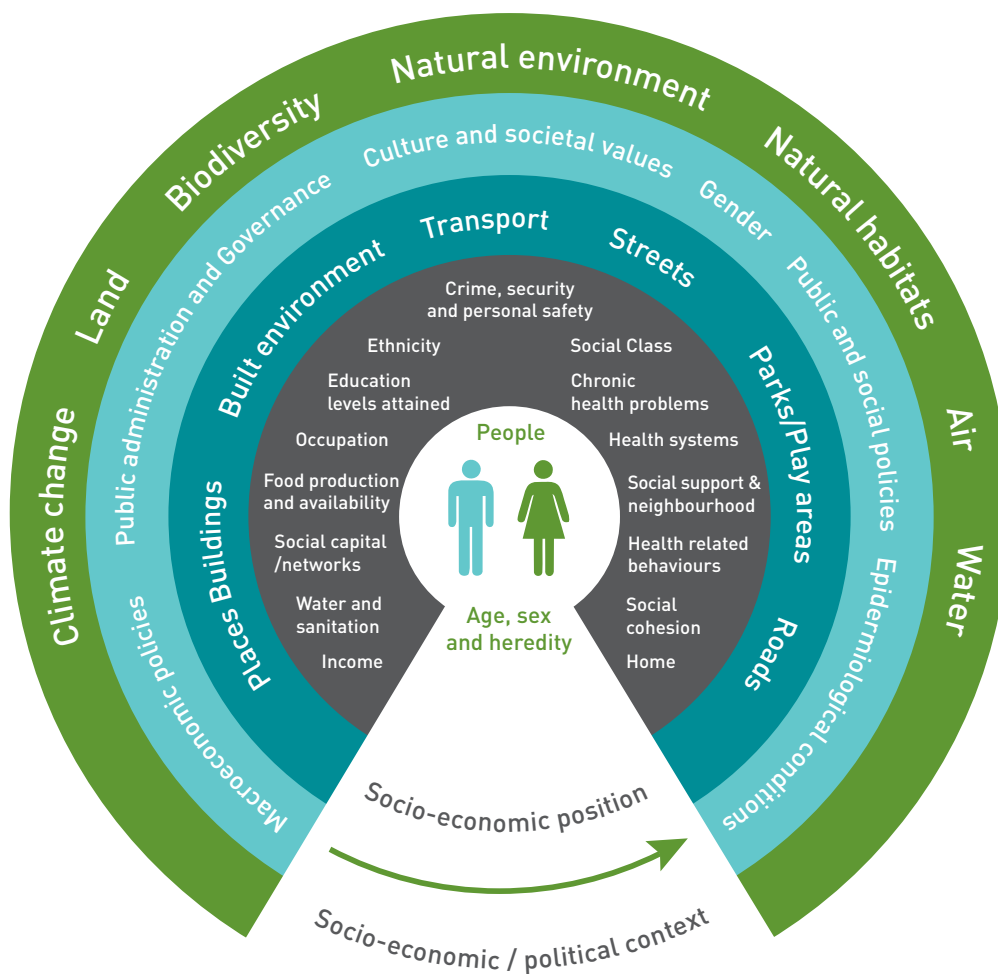
outcomes for identified vulnerable groups; its focus on promoting healthier lifestyles, mental health literacy and early intervention services in accordance with the Healthy Ireland Framework. The Department of Children and Youth Affairs' (2014) *Better Outcomes, Brighter Futures* sets out a whole Government policy and statement on the Government's intentions for children, young people (up to 24 years) and families. While a number of the intentions are related to this review (e.g. improving targets to reduce child poverty, supporting early intervention and parenting, enhanced job opportunities), most relevant is the commitment to improving young people's health and wellbeing. This commitment involves a reiteration of the goals of the *Healthy Ireland Framework* (Department of Health, 2013) and other Government health policies. It also puts a significant focus on addressing lifestyle issues relating to obesity, mental health and risk taking and overall, the framework requires integrated intervention on the part of a range of statutory and voluntary actors for its implementation. The Department's first ever National Early Years Strategy was forthcoming at the time of writing.

The Institute of Public Health in Ireland (IPH) carries out a lot of work on social determinants and health inequalities. According to the IPH, the causes of health inequality are complex but they do not arise by chance. Social, economic and environmental conditions (i.e. the social determinants of health – see Figure 1) strongly influence health and are largely the results of public policy. The IPH develops quality policy-relevant evidence on health inequalities on the island of Ireland and supports the evaluation of initiatives that tackle inequalities to help extract information on what works. It also supports the translation of this knowledge into policy and practice through responses to government policy and consultations, contributing to working groups and committees relevant to health inequalities, supporting the implementation of government health and social inclusion policies, and producing policy briefings. Additionally, the IPH carries out

Health Impact Assessment (HIA) which includes policy analysis, demography, collation and analysis of evidence of health impacts, quantitative and qualitative research, and community consultation. According to the IPH, HIA addresses a wide range of health determinants including biological factors (e.g. age, sex, genetic makeup), lifestyle choices (e.g. diet, physical activity, smoking, alcohol consumption, sexual behaviour), social and economic factors (e.g. income, poverty, employment, social exclusion), and the physical environment (e.g. housing, transport, noise, air, water quality).

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Figure 5 Social Determinants of Health. Source: Department of Health (2013) Healthy Ireland. A Framework for Improved Health and Wellbeing 2013-2015.



In its Corporate Plan 2010-2013, the IPH set out cross-sectoral work on the social determinants of health as a key area of action. At a European level, the IPH was the Irish partner in the *Crossing the Bridges* project, which developed coordinated and strengthened efforts to tackle health inequalities across Europe. Reports published by the IPH regarding health inequalities and young people, which are very pertinent for this review, include: *Tackling Health Inequalities: An All-Ireland approach to Social Determinants* (Farrell, et. al., 2008), and an evaluative analysis of prevention and early intervention in children and young people's services, undertaken for the Centre for Effective Services (McAvoy, et.al., 2013). Farrell et al. (2008) provide an overview of what is meant by the

term 'social determinants of health'; how these determinants are linked to inequality in health outcomes between different social groups; and what potential exists to do something positive about these inequalities. In terms of explaining Irish health inequalities, income inequality, child poverty, fuel poverty and poor housing were elements identified as playing a very significant part. The IPH, based on research evidence demonstrating the negative impacts on the short and long term health of children living in cold, damp houses, has called for greater effort to tackle fuel poverty among low-income households. It has also called for long term evaluation of the health offset of interventions targeting fuel poverty in low income households (IPH, 2009, 22- 23)

McAvoy et al. (2013) synthesise the early learning drawn from evaluations of ten interventions that were identified as addressing child health outcomes. These interventions were diverse and ranged from early years initiatives, to healthy schools interventions, to mentoring programmes, sexual health awareness for young people and strengthening resilience and personal safety programmes. Although reducing health inequalities was not a specific goal of the programmes, the location of many of the initiatives in areas of disadvantage, and the scope for the programmes to address social determinants of health and foster equality in child development, means that the findings are of particular relevance to health inequality concerns. The key points distilled from this evaluative work indicated that;

- Integrated working between primary care teams and other early years services is beneficial; that programmes can support parents and work very successfully with mothers but need to find ways to engage fathers
- The interventions demonstrated their potential to address health issues but also to improve developmental outcomes and much broader aspects of children's capacities
- An empowering approach worked best with young people rather than treating them as passive recipients of services
- Gender differences were evident in how interventions were experienced.

The lack of a national standardised minimum demographic dataset has resulted in a very ad hoc approach within health and social care to the collection of data. Such a dataset, it is argued by the IPH on its website, would result in safer care because there could be greater clarity as to what a data item actually means; a reduction in burdensome administration and cost as the same or similar data would not need to be collected repeatedly. It was pointed out that it could result in greater consistency, accuracy and understanding of the demand for services and it could help towards ensuring greater equity of access to

health care by providing reliable information on population patterns and trends. The Health Information Quality Authority (HIQA, 2013) has since sought to address this challenge with its provision of a *National Standardised Demographic Dataset and Guidance for Use in Health and Social Care Settings in Ireland*. The IPH, by virtue of its open access week to data, has highlighted how access to publications and data sources is not necessarily free, sometimes restricted and not always timely. This, the IPH has argued does not benefit public health or assist those organisations who do not have access to information but are working with the most vulnerable in society.

In Ireland, a report was published by TASC (Burke and Pentony, 2011) entitled *Eliminating Health Inequalities: a Matter of Life and Death*. TASC is an independent think-tank dedicated to addressing Ireland's high level of economic inequality and ensuring that public policy has equality at its core. The primary focus of TASC's current work is to identify solutions to the present economic crisis aimed at achieving recovery with equality. The report aimed to highlight the interrelationship between economic and health inequalities. The main thrust of the report was towards wealth and income redistribution and recommendations were put forward in the report as to how this could happen. The report refers to the Marmot Review (Marmot Review Team, 2010) in arguing the need for a multi-faceted approach to tackling societal inequalities.

TASC is an independent think-tank dedicated to addressing Ireland's high level of economic inequality and ensuring that public policy has equality at its core.

Three interdependent approaches are recommended to eliminate health inequalities: (i) targeting health initiatives at specific groups such as Travellers, (ii) reducing differentials in health outcomes between socio-economic groups by improving the health of deprived/disadvantaged groups, and (iii) reducing the social gradient in health by narrowing the gap between high and low-income groups. An independent review of health inequalities, similar to the Marmot Review in 2010, was recommended to address the three main themes identified by the WHO Commission on the Social Determinants of Health. This review, it was claimed, should be used to develop a new population health policy in Ireland which would be led by a cross-departmental team chaired by the Minister for Health. The need for a reorientation of health policy in Ireland away from services and towards population health was underlined. Other key recommendations in the report are to improve daily living conditions including emphasising early childhood development and education, gathering data in respect of health inequalities, and reviewing policy or creating new policies that are evidence-based.

Amnesty International Ireland (2011) *Healthcare Guaranteed? The Right to Health in Ireland* set out to establish what the right to health might look like in the Irish context. While the report acknowledges the useful principles relevant to human rights in the Irish National Health Strategy *Quality and Fairness: A Health System for You*, (Department of Health and Children, 2001) it argued that there is no systematic integration of human rights into the Irish health system and policy infrastructure. The report drew attention to the barriers in health care access and poorer health outcomes for Travellers and the migrant population. It identified the various ways in which cost acts as a barrier to individuals accessing health care services. The report made a number of recommendations focused on making enough provision in legislation, policy and provision for people to exercise their right to health. It called for greater government accountability for delivering persons' right to

health and it acknowledged that much more sophisticated data collection and collation would be required to facilitate the rights based approach outlined in the document. This included a requirement that the Department of Health and Children and the HSE would better track, assess and report on economic access to healthcare and that disaggregated data collection and analysis be significantly improved to monitor and address differences in access to health care and health outcomes in Irish society.

PART D:

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IRISH RESEARCH ON
HEALTH INEQUALITIES

Part D: IRISH RESEARCH ON HEALTH INEQUALITIES

Irish research on child and youth health inequalities has been selected and reviewed according to the two thematic areas taken from the Marmot Review (2010) and these are:

- Giving Every Child the Best Start in Life
- Enabling Children and Young People to Maximise their Capabilities and to Have Control over Their Lives.

We recognise that this thematic focus put restrictions on the studies included but it was necessary to ensure that those studies which tell us most about health inequalities as they relate to children and young people were given sufficient consideration.

GIVING EVERY CHILD THE BEST START IN LIFE

Low birth weight babies are concentrated among lower socio-economic groups and the rate of breastfeeding is also impacted by social class and age differentials, with more affluent and older women more likely to breastfeed in Irish society (McAvoy et. al., 2006; DCYA, 2012). Poorer women, teenagers and ethnic minority women are also less likely to avail of antenatal care (McAvoy et. al., 2006; DCYA, 2012). Given the strong association between low birth weight and income inequality in the Irish context, the need for indepth and transnational social policy research and analysis to assess the adequacy of income and social protection for low paid and unemployed pregnant women in Ireland was identified in a research report by McAvoy et. al., (2006). The same report highlighted some of the key challenges limiting the usefulness of the National Perinatal Reporting System in terms of its validity and reliability for research purposes.

It drew attention to the absence of nationally representative data on birthweight according to ethnic group in Ireland. It noted the lack of audit, evaluation and efficacy data on specifically designed interventions addressing the well established relationship between socio-economic group and low birthweight. The profound impact that societal level interventions could have on pregnancy outcomes was not well researched, the report stated. To access more information on factors at play in explaining the disparities in low birthweight according to socio-economic group, more research was recommended. Finally the report called for the development of a basket of child health inequality indicators relating to birthweight, mortality, injury, disability, dental health etc. on the basis that low birthweight is an important cause and consequence of inequalities in child and maternal health. Discussing the main findings of the report at a workshop, key stakeholders recommended the introduction of a minimum income standard and second tier child income payments, improved access to pre-school education, free health care for disadvantaged groups and universal child care services and improved access to education for teenagers as important steps in Ireland towards addressing the social determinants of maternal and child-health.

The profound impact that societal level interventions could have on pregnancy outcomes was not well researched, the report stated.

Interventions targeting parents to improve parental health and health outcomes for children provided the focus of a literature review undertaken by Cotter (2013) for the Institute of Public Health. While the review acknowledged the lack of longitudinal research to claim with any certainty that parental interventions potentially improved parental mental health and health outcomes for children and children at risk in particular,

the review did find compounding evidence from other kinds of research indicating that parental interventions generated positive results in the short and medium terms. *Triple P and Incredible Years*¹¹ were identified in the review as two of the parent intervention models which seemed to yield very positive outcomes as reported in many contexts. Universal but tapered provision with re-entry points across childhood was the approach advocated to maximise effectiveness of a parental intervention (Cotter, 2013).

Growing Up in Ireland

'Growing Up in Ireland' (GUI) a national, longitudinal study of children in Ireland, is funded by the Department of Children and Youth Affairs in association with the Department of Social Protection and the Central Statistics Office. The research, carried out by a team of researchers led by the Economic and Social Research Institute (ESRI) and Trinity College Dublin (See ESRI and Trinity College Dublin, 2011-2013). The study is following the progress of almost 20,000 children across Ireland to collect a host of information to help improve understanding of all aspects of children and their development. A significant advantage of the GUI dataset is that it is longitudinal and that it can facilitate exploration of relationships across the dimensions of children's lives as well as cross-national comparisons with countries where such longitudinal studies of children's wellbeing are also underway. It provides a very essential evidence based resource for strengthening a life-course approach in policies and practices seeking to addressing health inequalities in the Irish context. Primary and secondary analyses of this dataset are already helping to fill some significant knowledge gaps in relation to health inequalities in the Irish context.

The evidence relating to links between SES and child health, fairly extensively studied in other contexts and discussed earlier in this review,

is very limited in Ireland by comparison (Nolan and Layte, 2014). The first paper to examine SES patterns across a number of indicators of child health and across two cohorts of children was published in 2014, based on cross-sectional micro data from the Growing Up in Ireland study (Nolan and Layte, 2014). For nine month old infants, there was little evidence of a statistically significant income gradient in child health, which contrasted with findings of other international studies in this area. For the child cohort (nine year olds), a significant income gradient in height was observed and in parental-assessed child health but not in chronic illness incidence. The absence of longitudinal data at the time of the study made it impossible to examine if SES gradients narrow or widen as children age in the Irish context. This publication was identified as an important first step in documenting the extent of SES inequalities in child health in the Republic of Ireland but that further study required extra waves of the GUI datasets to become available. The implications of the relevant absence of longitudinal data and studies based on longitudinal data in Ireland are made evident by the international review conducted for the purpose of this research.

The report from the Growing Up in Ireland Study Team: 'Development from Birth to Three Years' was launched on 20th September 2013. Data collection for Wave 1 was completed in May 2008 and in February 2012 for Wave 2. Several publications have arisen from the research and some of these are specific to health. One of these publications pertains to Wave 1 – at 9 years old (ESRI and TCD, 2011). Some of the key findings from this Wave include that almost all parents (98%) indicated that their child was in good health. However, some differences were noted in rating by social class. Seventy six per cent of children from professional/managerial socio-economic groups were rated as being 'very healthy' compared with 69% of children from semi-skilled/unskilled

¹¹ Triple P is a positive parenting programme and is utilised in a significant number of countries. The Incredible Years is a series of interlocking programmes for parents, teachers and children also used in a number of different contexts.

backgrounds. Chronic illness or disability was more heavily concentrated among children from lower socio-economic backgrounds - 12% of those from semi-skilled/unskilled backgrounds had a chronic illness while 10% of those from the other 2 class categories had a chronic illness. In terms of oral/dental health, 9% of children from the lowest income band did not brush regularly compared with only 3% of those in the top income band. In terms of physical health and development, the height of 9 year olds increased as their family's social class increased and the weight of 9-year old girls fell with increases in social class but this pattern was not evident in boys. Furthermore, 22% of children from semi-skilled/unskilled backgrounds were classified as overweight compared with 18% of children from professional/managerial backgrounds.

Only 25% of children said they had engaged in the recommended 60 minutes of physical exercise for each of the 7 days previous and boys were more likely than girls to engage in physical activity.

Only 25% of children said they had engaged in the recommended 60 minutes of physical exercise for each of the 7 days previous and boys were more likely than girls to engage in physical activity. While there were many positive features in the research findings on the infant cohort who were followed up at five years old (Wave 3 at five years) to explore their socio-emotional wellbeing, there was evidence that for a minority of children, persistent problems were manifest over time and were posing challenges for children in their home life, their relationships, at school and for their families (ESRI and TCD, 2013). Also at age five, the social gradient in health had begun to emerge more significantly than at birth and nine months, with a higher percentage of parents (75%) from the

higher rather than the lower social class groups (67%) reporting that their children were very healthy. Social class differences were also evident in relation to the amount of children's screen time and leisure activities. One in five children, was identified as obese at age five and higher numbers of children in the lower socio-economic groups were obese or overweight. Gender differences were also evident in terms of boys' higher levels of physical activity and sport. While parents reported low levels of conflict with children generally, economic strain was associated with higher levels of parent child conflict as reported by parents in families.

In terms of Wave 2 – at 13 years old, only one of these publications is directly relevant to health: Physical Activity and Obesity among 13 year olds (ESRI and TCD, 2012). This report says that higher levels of exercise were associated with higher social class and more parental education. Additionally, young people from professional/managerial social groups were more likely than others to play organised sports (i.e. with a coach or instructor) at least weekly, while those from the lowest social group were less likely to ever be involved in these kinds of activities. Meanwhile, 37% of 13-year-olds in the lowest social group never participated in organised sports, compared with 17% in the highest social group. Social class was also related to stability of weight status. Children in the highest social group (professional/managerial) were more likely to be non-overweight at both ages, and those who were obese at 9 years were less likely to still be obese at 13 years, than those in the other social class groups. The research report pertaining to mothers' return to work and childcare choices (ESRI and TCD, 2013a) highlighted the high cost of paid childcare for under three year olds in Ireland. It revealed how the cost acts as a disincentive to employment for low income and low educated families and how it makes some women's continuous employment much less likely. The GUI study's findings illustrate some of the key socio-economic differences in health among young

people in Ireland. The GUI dataset has also been utilised and further mined by researchers looking more closely at health issues and inequalities among diverse social groups in Ireland. Much of this research focus has been on such issues as bullying, weight, body image, poverty and disability. In the Irish context, where 8% of teenagers (15-19) and 5.4% of under fourteen year olds have a disability, one study which further analysed GUI data, highlighted the additional hardship and extra cost on families which include a child with a disability (Roddy and Cullinan, 2012). Another study which examined the association between infant ill health and maternal immigrant status in Ireland using the nine month old infant cohort of GUI data, indicated the existence of a healthy immigrant effect which seemed to diminish with passing of time spent living in Ireland (Ladewig, O'Dowd and Reulbach, 2012). A study of relationships and wellbeing in the families of nine year olds, based on Growing Up in Ireland data indicated that the education level of mothers was the strongest and most pervasive predictor of children's wellbeing. Children of mothers with very low levels of education were at a disadvantage relative to other children, particularly in terms of their reading and mathematics abilities (Fahey et. al., 2012). In another study (Watson et. al., 2012) utilising SILC data, in which low income was found to be the strongest predictor of child specific deprivation, mothers' education and employment were identified as having considerable potential in protecting children from deprivation. Both of these studies indicated that improving mothers' educational attainment and employment chances in Ireland could be a strategy pursued to enhance children's wellbeing and protect them from deprivation (Watson, et. al., 2012). The former study's findings revealed that combating educational disadvantage was good for family wellbeing and it recommended extending universal free pre-school provision. In both studies (Fahey et. al., 2012; Watson et. al., 2012) concern as to the impact of cuts in child benefit on large families' wellbeing was also raised.

Health Behaviours of School Aged Children

Highlighting the connection between health inequalities and diverse childhoods in Ireland, the Health Behaviours of School Aged Children survey data collected in 2010 (focused on children from fifth class to sixth year) drew attention to higher rates of alcohol use, poorer diets and higher levels of bullying victimisation among Travelling children, immigrants and children with disabilities or chronic illnesses (Kelly, 2012). Fewer immigrant students reported that other students in their classes are kind and helpful and that other students accept them as they are. Fewer boys with a disability or chronic illness reported feeling happy with their lives and more students with a chronic illness reported experiencing food poverty. Fewer students in DEIS schools (schools with disadvantaged area status) reported feeling very happy about their lives and they were also more likely to report risk behaviours such as smoking and drinking alcohol (Kelly, 2012).

Travelling and Migrant Children

The all-Ireland Traveller Health Study, led by a team from University College Dublin, involved a four year research programme involving quantitative and qualitative studies on Travellers in Ireland's health and social circumstances (UCD, 2010). Based on this study, a picture of an indigenous minority population at risk of very poor health has been established.

One of the main findings from this comprehensive study is that Travellers of all ages continue to have significantly higher mortality rates than people in the settled population.

One of the main findings from this comprehensive study is that Travellers of all ages continue to have significantly higher mortality rates than people in the settled population. Deaths from respiratory diseases, cardiovascular diseases and suicides are more markedly increased in the Traveller population. Notwithstanding some positives in terms of improvements in Traveller women's health and access to health services, low levels of education attainment, discrimination and negative experiences of health care, indicated that more effort is required to offset the inequities experienced by Travellers which impact negatively on their health throughout the life-course (UCD, 2010). The urgent need to improve health outcomes for Travellers and migrant children has been identified by the Children's Rights Alliance among other organisations. 42% of Travellers are under 15 years of age according to Census 2011 and infant mortality is 3.6 times greater among Travellers than that of the settled population. Rates of asthma, speech, hearing and eyesight problems are also high among this community, a community which reports low levels of trust in health professionals (Children's Rights Alliance 2013).

Living in direct provision centres has a very negative impact on the health and quality of life of children in the asylum system, due to the overcrowding in these centres, the risk posed to children's protection and the reported evidence of material deprivation and malnutrition experienced (Fanning and Veale, 2004; Irish Refugee Council, 2012; Children's Rights Alliance, 2013). Furthermore, while some effort has been made to close the significant child protection gap experienced by separated children and other looked after children in Ireland, once separated children become age out minors/adults or reach age eighteen, they make the transition from care provided by the HSE to direct provision, in which they experience very limited support, are required to live on little income and are vulnerable to abuse and exploitation. The Children's Rights Alliance in awarding a grade E to the Irish government in 2013, did so on the basis that there was not

enough meaningful action being taken by the state to improve the health and other outcomes for Traveller and migrant children living in Irish society (Children's Rights Alliance, 2013). What evidence we have suggests a multiplicity of barriers for migrants and ethnic minority groups in accessing Irish healthcare services including free services on the basis that entitlement to such services is largely based on residency and means (Cairde, 2006). In one study focused on new communities in Ireland, persons who participated in focus group discussions related experiences of Irish health services which they found to be uncaring, of poor quality, with long waiting times and delays (Lakeman, 2008). In a qualitative research project conducted with young migrant women in Ireland on issues pertaining to sex, fertility and motherhood, they reported low levels of engagement with Irish health services, due to language issues, limited knowledge, cost issues and unfamiliarity with how to access services. They often relied on pharmacies and websites to access health advice or contraception and many young migrant women engaged in transnational health service usage, relying where possible on their home country for healthcare (Conlon, et. al., 2012).

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Poverty and Economic Recession

Since 2009, universal child benefit payment has been cut, early childcare supplement abolished and payments to the young unemployed have been reduced. Annual SILC (Survey of Income and Living Conditions) data analysed specifically to look at the circumstances of children under 18 years (2004-2010), showed that the rate of consistent poverty was higher for persons living in households with children than for those in households without children (8.0% compared with 3.8% respectively in 2010) and the level of enforced deprivation (lacking two or more basic items) for persons living in households with children in 2010 was also greater (28.2%) than for those living in households without children (14.6%). Among children the highest at risk of poverty rate in all years occurred in the 12-17 age band (26.1% in 2010) compared with a rate of 19.2% for 6-11 year olds. Family allowances were also found to play a huge part in shielding persons from the worst effects of poverty in households with children (CSO, 2012).

The Growing Up in Ireland data also provides evidence of the impact of the recession on families who took part in 2008 and 2009 when their children were infants, and were re-interviewed again in 2011, when their children were three years old (ESRI and TCD, 2011). 21% of parents of three year olds reported great difficulty and 40% reported some difficulty in making ends meet and the percentage increase in families headed by unemployed fathers had risen from 6% (2008-09) to 14% in 2011. Families in which mothers had a low level of education attainment were most likely to be living in low income households and two thirds of all families reported that the recession had a very significant impact on them. Research conducted by the Equality Authority and the Economic and Social Research Institute (ESRI) on the equality impact of the economic recession based on income data up to 2011, established that the unemployment rate deteriorated most for those aged between 15 and 24 years and that the highest rates of income poverty were recorded for

the youngest section of the population; children and young adults aged up to 19 years (McGinnity et. al., 2014). Labour market training for 25 year olds and under as well as prevention of early school leaving were identified as important areas for policy making.

Based on studies findings (Conger and Donellan, 2007; Cooper and Stewart, 2013; Russell, et. al., 2013) that show financial strain or difficulty making ends meet has been found to be more strongly associated with well-being and indeed children's well-being, than income, CSO SILC data for the period 2004 until 2011 was used to develop and test a measure of economic stress, aimed at capturing some of the aspects of the recession which brought rapid and significant change to Irish households (e.g. debt, unsustainable housing costs, household management on reduced income) the impact of which would not be captured by measuring income alone (Maître, et. al., 2014). Findings indicated increased stress for all class groups in Ireland, but increased stress for middle income groups (lower middle class and precarious class) than for others. Furthermore, the period (2004-2011) increase in stress was greatest for those in the age group 35-54 and in this context, mortgage debt seemed to play a significant part (Maître, et. al., 2014).

Early School Leaving

While there are high rates of school retention in the Irish context and the gender gap in school retention seems to be closing, it is still the case that children in disadvantaged communities experience the majority of the loss in retention. The Leaving Certificate (final exam taken in the final year of second level schooling) retention rate for the 2006 cohort in DEIS schools (i.e. schools designated disadvantaged) is 80% and though it is improving, it is still 10% lower than the national average rate (Department of Education and Skills, 2012), despite sustained action over a significant period of time designed to increase school retention. It remains to be seen if Ireland succeeds in its target to reduce early school

leaving (persons whose highest level of education or training is the junior certificate or equivalent) to no more than 8% by 2020, from approximately 11% in 2011 and its position as joint twelfth in EU member states (Department of Education and Skills, 2012).

Youth Homelessness

In 2013, a qualitative longitudinal study of youth homelessness was completed, which covered a six year period and included three phases of data collection with young people experiencing homelessness in the Dublin region (Mayock, et al., 2006, 2013). Difficult and traumatic early childhoods as well as poor and deteriorating relationships were experienced by those studied and their accounts also revealed the interconnectedness of homelessness, drug and criminal careers. Negative relationships with key state institutions and services over time ensured that at a very young age, those homeless were living outside or marginal to the key services designed to facilitate children's transitions into young adulthood. Failings in key socialising agencies (family, education and child and family services) were identified as playing a significant part in explaining young people's routes into homelessness, however, the effectiveness of measures facilitating exit from homelessness were acknowledged. At the same time, it was pointed out that given the gender gap in homelessness exit, more effort needed to be targeted at enabling young men to exit homelessness to ensure that with the passing of time their lives do not become even more hazardous.

- Considering that much of the evidence compiled for this review suggests that the strongest interventions are those, which attack disadvantage experienced at the start of life, and which clearly impact on subsequent health; it is clear that more needs to be achieved in the Irish context to cultivate a good start in life for every child and sustain it through middle childhood and adolescence.

ENABLING CHILDREN AND YOUNG PEOPLE TO MAXIMISE THEIR CAPABILITIES AND TO HAVE CONTROL OVER THEIR LIVES

Child and Youth Mental Health

Mental illness presents a considerable threat to young people in terms of maximising their capabilities and exercising control over their lives, yet it is an area which has received insufficient attention in Ireland over time. Waiting lists for services, under-resourced Community Mental Health Adolescent Teams, patchy and poorly co-ordinated service provision, a lack of focus on early intervention and the ongoing treatment of children in adult inpatient mental health units in violation of their human rights and a lack of legislation allowing them to protect their rights, are some of the issues which continue to impede progress in this field. A recent report by the Children's Mental Health Coalition (2013) underlined the fact that some young people who are looked after (in care) or who offend and end up in the youth justice system, do so because their mental health needs when they first emerged were not adequately addressed. Furthermore these young people continue to need responsive and supportive mental health care support, which is not being adequately provided in the best possible ways.

The report made a number of recommendations in line with international best practice to improve mental health care provision for these most vulnerable groups of young people (Children's Mental Health Coalition, 2013)

The report made a number of recommendations in line with international best practice to improve mental health care provision for these most vulnerable groups of young people (Children's Mental Health Coalition, 2013). In 2003, there were 188 admissions to adult psychiatric units and hospitals with eating disorder diagnoses (O'Reilly, 2005). A very small number of persons admitted receive the specialist care they require as critical service gaps exist in relation to this issue in Ireland. Some of these, which have been identified by O'Reilly (2005) of BODYWHYS, the Eating Disorders Association of Ireland, are the poor early identification of these illnesses and the effectiveness of response at primary care level, very limited publicly funded out-patient and day care programmes and the existence of only three specialist beds, all in the Dublin region, which cannot be expected to meet the demand for treatment.

The Crosscare Teen Counselling Annual Report for 2011 provides some insight into the problems experienced by teenagers and their families, which cause them to seek counselling supports. Behavioural problems in different settings provided the main reason for referral of the majority of young people (59%), conflict or parental separation was next (37%) and emotional problems such as anxiety was the reason for 36% of referrals. The percentage of new teenage clients reporting self-harm had doubled between 2010 and 2011 (from 11% to 22%). The use of alcohol and other drugs was also reported by the young people accessing counselling and the report noted a significant increase between 2010 and 2011 in the percentage of young people under 16 years of age who were smoking (Crosscare Teen Counselling, 2012). A report on tobacco, inequalities and childhood in Ireland (McAvoy et al., 2013) found that social disadvantage was associated with children trying smoking at a younger age. This association was evident in respect of children from low affluence families. Smoking in childhood was associated with a range of socio-economic factors, such as social class,

financial disadvantage in families and children with lower academic achievement. Disadvantaged children are more likely to live in households with smoking adults and thus at greater risk of exposure to second hand smoke (McAvoy et al., 2010). Considering this finding, the revised policy on tobacco control, Tobacco Free Ireland, is a welcome development and its commitment to develop alongside other actions, risk based approaches to make Irish society tobacco free by 2025 (i.e. a smoking prevalence rate of less than 5% of the population in Ireland) (Tobacco Policy Review Group, 2013).

The CAMHS report for 2011/2012 indicated an increase of 17 % in the number of referrals to CAMHS teams between October 2011 and September 2012 (HSE, 2012). This increase was in part explained by the upward trend in re-referrals since 2008, which coincides with the onset of the economic recession in Ireland. Hyperkinetic disorders, anxiety disorders and post-traumatic stress disorder were the main disorders experienced by those referred when a clinical audit was undertaken in November 2011 of a number of persons receiving support. Males made up the majority of all primary presentations with the exception of eating disorders, deliberate self-harm, depression and emotional disorders, where females were in the majority. Twenty per cent of children seen by the CAMHS in November 2011 were in contact with social services (HSE 2012). A strong connection has also been found between frequent mental distress in the Irish Travelling population and various aspects of their life experiences but most specifically with the psychosocial factors associated with bereavement and experience of discrimination (McGorrian et. al., 2013). Suicide rates are also much higher in the male Travelling population when compared with the general male population (UCD, 2010).

Considering that repetition of self-harm is a strong predictor of future suicide, rates of self-harming have been increasing in the Irish context and what is of interest for this review, is that the peak rate for

men is the 20 – 24 age group and the peak rate for women is in the 15 - 19 age group (Griffin, 2013). Among males aged 40 years and under who have taken their own lives, unemployment, a history of self-harm and a diagnoses with depression have been identified particularly as risk factors in the Irish context. Based on this information the National Suicide Research Foundation (NSRF) has advocated for improved access to health care services for those who engage in self-harm, the prioritisation of suicide prevention programmes during periods of economic recession and national strategies to increase awareness of the risks involved in alcohol use, starting at pre-adolescence (Arrensman, 2013).

Children in Care

The number of children in care (i.e. looked-after young people - LAYP) in Ireland has increased by 27% over the past decade (McNicholas, O'Connor, Bandyopadhyay, Doyle, O'Donovan, and Belton, 2011) or by 16% between 2007 and 2011 (Department of Children and Youth Affairs, 2012). With reference to child and youth mental health, discussed in the previous section, a HSE report in 2006 stated that mental health problems occur in 60-70% of the children in care, with as high as 90% in the children in residential care population (HSE, 2006). The massive risk of mental health problems occurring in this population of children and adolescents is clearly evident. Recently published research commissioned by the association EPIC (Empowering Young People in Care) examined the issues facing young people leaving state care in North Dublin (Daly, 2012). It was reported that forty two of the young people were first placed in care because of their parents' inability to cope or their parents' alcohol and drug problems; twenty seven were first placed in care owing to abuse and neglect. Eleven of the young people were first placed in care because of their own alcohol and drug use and behavioural problems. Seventeen were first placed in care when aged five or under. It was noted in the study that there is no statutory obligation on the HSE to provide aftercare, though sometimes young people considered to be in

particular need are given a package of supports and services when they leave care. Some of the data pointed to positive outcomes for young people leaving care in the form of educational achievements, contact with family, no engagement in risky behaviours, stable accommodation and good physical and mental health. However, there was also evidence of regular alcohol consumption and smoking, including illicit drug use and mental health issues among the sample studied, which had increased or decreased at different stages of data collection. Data were also collected through interviews with eight of the young people. The main issues identified in the analysis of the data were that the young people were concerned with multiple accommodation moves and with their mental health needs after leaving care. They identified social support as their greatest need and were concerned about the speedy transition from care to the community, preferring more step-down supported accommodation to aid a gradual transition. Overall, they spoke positively about the aftercare support they were receiving but had concerns about not having access to their support workers during out-of-office hours and with challenges they experienced around budgeting.

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Young Carers

The first national qualitative study of young carers in the Irish population highlighted positive and negative experiences of this group (Fives et. al., 2010). Nine young people studied were primary carers and seventeen were secondary carers. All the primary carers were caring for a parent and all the secondary carers were caring for a sibling.

In two cases the young people cared for both their parents and their siblings and two young sisters also provided care for a grandmother. The negative impacts of their caring roles on their health and well-being included school absences or distraction while at school, feelings of social isolation due to lack of time for leisure or friendships, physical illness, the pressure of being on call constantly and feelings of boredom, anxiety and resentment. While they received a range of formal and informal supports, more were needed. One important finding was the development by services they are in contact with, of referral pathways to other services, which can meet their specific and sometimes diverse needs. The study also called for greater knowledge about the number of young carers in the Irish population, which could be facilitated if census data on young carers was collected, as it is in the UK. The study also identified the need for greater consideration of the different contexts in which young people care and the interventions effective in supporting them in their particular family situations.

Health Care Access

In terms of access to basic health services, in 2010 there were 2591 children on hospital waiting lists for treatment and 8.7% of this number were on waiting lists for one year or more. The Children's Health Alliance (2013) also noted the significant waiting list of children needing speech and language therapy. While the number of children on a hospital waiting list awaiting treatment has been declining in the last few years (Department of Children and Youth Affairs, 2012) such waiting lists indicate the problems experienced by children accessing significant health services., It also highlights the failure to respond to many children's health needs in a timely way, thus negatively impacting on their health and quality of life now but with serious consequences for their futures.

To date most of the empirical analysis of income related equity in health care utilisation in Ireland has focused on an adult population only (Layte and Nolan, 2014). However, comparison between Growing Up in Ireland data in Ireland and Growing Up in Scotland data demonstrated the deterrent effect of GP user charges in the Irish system¹² as a particularly significant finding where children in low income families are concerned. The possible implications of the Irish system for children's poorer health and more extensive secondary care in the future were raised. Only very slow progress in providing good quality integrated primary health care services is being made, though the introduction of universal primary care and the removal of GP fees for all, has been promised by the Government within its lifetime. While in 2013, the removal of fees for the under-five population for GP services has been welcomed, it was overshadowed by the removal of discretionary medical cards, with significant implications for families of children aged over five with disabilities, who because of their disabilities have significant health care needs.

Alcohol and Drug Use

The early onset of alcohol use among some children (ages 10/11 years) as well as the high number of children and young people, who engage in frequent, risky and heavy alcohol use, has generated concern for some time in Ireland. However, there still exists some doubt that the measures introduced are robust enough to address the problems and it is argued that options, which may be more effective, have not been adopted (NYCI, 2009). In 2009 research undertaken by the National Youth Council of Ireland (NYCI) engaged young people and young adults in a mapping exercise to explore their exposure to alcohol advertising and marketing on a daily basis and its appeal for them. A key finding was that despite the restrictions on alcohol advertising and marketing that exist in Ireland, 16 different

¹²The majority of people in Ireland pay the full cost of GP care in Ireland, which is unusual in a European context, in Scotland all residents are entitled to free GP care at the point of use [Layte and Nolan, 2014].

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channels of communication were identified by the young people, which exposed them to alcohol advertising and marketing on a regular basis. Television advertising, promotional flyers and online advertising featured prominently. The young people also identified those advertisements that they found to be most appealing because they were funny, clever, highlighted cheap products or offers, or were attractive, cool or eye-catching. The findings were used to challenge claims by the drinks industry in Ireland that they do not target children and young people in their marketing strategy. The findings were also used to highlight that existing measures, such as the pre-vetting system for alcohol advertising and the audience profiling for the placement of alcohol advertisements on broadcast media, do not go far enough to address the risk posed by young people's exposure to marketing practices promoting alcohol in the Irish context (NYCI, 2009). In 2009, the ISPCC (2010) conducted a survey which examined young people's (from 70 secondary schools, eight primary schools and six Youthreach centres) alcohol use, their attitudes towards teen and parental alcohol use and the effects of parental alcohol use on their lives. Over two fifths (45%) reported that they drink alcohol and 25% reported they had engaged in binge drinking in the two weeks prior to the survey. More than half (56%) stated that they did not believe it was 'okay' for teenagers to drink alcohol to get drunk and 79% disagreed with

parents drinking alcohol and becoming drunk in front of their children. One in ten stated that their parent/guardian's alcohol use affected their life. The effects of parental drinking described by the respondents included emotional impacts, abuse and violence, impacts on family relationships and changes in parental behaviour (ISPCC, 2010). In October 2013, the Government introduced a public health legislative bill to put in place additional measures to respond to the harmful use of alcohol such as raising the minimum price of the cheapest alcohol products, requiring more detailed labelling and health warnings on alcohol products and placing more significant limits on the advertising and marketing of alcohol (Department of Health, 2013).

Research based on the examination of National Drug Testing Treatment Reporting System (NDTRS) data for the period 2007-2010, provides support for the issues raised by Van Hout (2011) based on her research and documented earlier in this review. This research (Carew, et. al., 2013) also drew attention to the need to direct policy and practice towards the particular risks confronted by the Travelling community in Ireland where alcohol and substance abuse are concerned. The median age of commencing drug use was 14 years for Traveller males and 16 for Traveller females accessing treatment in Ireland. It was also noted that the median interim period for first use and treated use was much shorter for Traveller women than for women in the general population. Injecting risk was also proportionately higher among Traveller women than women in the general population. Furthermore, the incidence of treated problem substance use was three times higher for Travellers than for the general population in 2010. Treatment for alcohol, opiate and benzodiazepine use all showed marked increases in this population (Carew et. al., 2013).

LGBT Youth

The findings of one particular study, involving a multi-modal approach including both quantitative and qualitative methods, highlighted the important role played by social and structural factors in determining the mental health of LGBT young people and adults in Ireland (Mayock, et. al., 2009)¹³. Psychological distress experienced by LGBT people was found to be strongly associated with external stressors in their environment such as presumed heterosexuality, homophobia, prejudice and victimisation. Varying levels of LGBT victimisation was reported. Over half of all on-line survey respondents, who were school goers, reported the experience of homophobic bullying in their schools and this was in keeping with a finding in another study a few years earlier (Norman et. al.2006). Evidence was also gathered that the stigma and discrimination experienced by LGBT people caused many to experience depression and a minority to engage in self-injurious behaviour, suicidal ideation and attempted suicide. One half of those aged 25 or younger at the time of completing the survey for this study admitted to ever having given serious consideration to ending their own lives and 20% reported having attempted suicide. A higher proportion of those identifying as bisexual (25%) had attempted suicide than those who identified as gay or lesbian and over a quarter of those (n=12) who identified as transgender (n=46) indicated that they attempted suicide at least once. Several barriers and issues relating to health care were identified by study participants with the exception of LGBT specific youth services, whose health promotion activities were positively evaluated. For those experiencing very positive health and wellbeing, friends, family, the support of the LGBT community as well as school and workplace supports were acknowledged as being of considerable importance. Recommendations targeted at improving health policy, health based professional practices, supports in other

social settings (e.g. family, school community) were made, including recommendations for the improvement of data collection on the health and wellbeing of LGBT persons in Ireland (Mayock, et. al., 2009). Considering that this study is due to be conducted again, it should provide some insight into how LGBT lives and experiences have changed or not over time in Irish society.

A research report based on qualitative interview data documenting the experiences of LGB people with health services in the North West region of Ireland (Gibbens et. al., 2007) illuminated barriers to accessing health services for those interviewed and it made suggestions as to how health services might be improved for LGB clients. For example, it was stated in the report that a culture of rights should be prioritised for services over special treatment. The need to counter heterosexism and homophobia as well as to address issues of same sex partners and next of kin in health care settings were also identified. Another research report (Collins et. al., 2004) highlighted that policy and practice around meeting the health needs of transsexual people is underdeveloped in the Irish context according to health care providers. The 17 transsexual people interviewed for the research reported very significant barriers to accessing treatments in an Irish context, often causing them and their families much psychological distress. While all but one person in the study group had begun questioning their gender identity before the age of 15, most only sought support when they were 30 years or over and from this point on, barriers to accessing support and treatment were indeed significant and diverse. A number of recommendations were made to develop policies and better standards of care for transsexual people in Ireland (Collins et. al., 2004).

¹³This study was based on 1,110 completed surveys. 30% of the sample were 25 years or under. 40 persons participated in in-depth-interviews. 40% of this sample were 25 years or under.

Youth Sexual Health

There is evidence that young people are accessing sex education in the Irish context with the development of formal and informal programmes in this area since the mid-1990s. A relatively high percentage of young adult respondents (18 – 25 years) relative to other age groups, reported in a national survey commissioned by the Health Service Executive Crisis Pregnancy Programme, that they received a sex education (McBride et. al., 2012). However, it is also evident that Irish young people do not think that the sex education they receive is sufficiently comprehensive, well delivered or that it meets their needs (Roe, 2010). Clearly there is a strong case emerging for more comprehensive sex education intervention in the Irish context, which has the potential to disrupt heteronormativity, to challenge sexist or oppressive attitudes and practices and to cover the relational aspects of sexuality to a much greater extent (Kiely, 2005; Mayock et. al., 2007, Roe, 2010). The poor sexual health experienced by young adults in the Irish context as evidenced by the increased notifications of STIs among this population, provides another important piece of evidence that further interventions are needed to reverse this trend. The upward trend in STIs has been evident since 1995. Higher prevalence rates exist among a range of groups (women, gay men, ethnic groups) which include teenagers and young adults as those aged 20 -29 make up more than half of the notifications of STIs (59.3%) (HPSC, 2011). Barriers accessing sexual health services in the Irish context have been identified as significant for early school leavers (Mayock et. al., 2004), for socially and economically disadvantaged young men (Nixon et. al., 2010) and for young migrant women (Conlon et. al., 2012). While the Crisis Pregnancy Programme's research agenda designed to develop its evidence base to guide policy and practice has addressed some significant gaps in knowledge, more information is still needed as to how children and young people's sexual health needs, experiences and access to services vary by social class, sexual orientation, gender, ethnicity and age.

Support for Healthy Choice Making

Drawing on the evidence provided by five quantitative databases which was supplemented by additional quantitative research with disadvantaged women and qualitative research with women of lower SES, a study conducted for Safefood (Kearney et. al., 2008) found that individuals of lower SES had a more energy dense and micronutrient poor dietary pattern than their more affluent peers and that women and children were more vulnerable than men to SES differences in food and nutrient intake. The study identified a number of challenges (such as cost of food, social stresses and difficulties instigating dietary changes) involved in promoting better food and nutrient intake among this group but it also made a number of key recommendations for public policy and community interventions to address the challenges identified.

While in the Irish context as in others, there is a strong discourse that healthy choices are individual choices and that personal or parental responsibilities are the driver of good health.

While in the Irish context as in others, there is a strong discourse that healthy choices are individual choices and that personal or parental responsibilities are the driver of good health. The evidence examined for the purpose of the earlier part of the review and the findings of the above Safe Food study (clearly show that if people at the bottom of the social gradient are expected to successfully manage their own health, government interventions and supports are vital. Marmot's argument that all policy decisions need to be health equity proofed makes a certain amount of sense in this context (Cullen, 2013). For instance, while there is considerable

government and public concern about the problem of obesity in both the child and adult populations and persons are encouraged to make healthy food choices, forces in the Irish context, which militate against persons making healthy choices, have also been documented. Parents in Ireland surveyed perceive food advertising to act as a barrier to providing a healthy diet for their child (Walton, 2011; Irish Heart Foundation, National Youth Council of Ireland and Children's Rights Alliance, 2011). For instance while food advertising was considered a relatively insignificant barrier by parents surveyed in providing a healthy diet for their children aged between 12 and 59 months, it gained in significance according to parents as their children got older (Walton, 2011 i.e. IUNA). Furthermore, study findings illustrated that health eating policies and the availability of nutritious foods in Irish post-primary schools are actions undermined by the widespread availability of confectionary, soft drinks, salty snacks and biscuits on the school site (vending machines) and from outlets (shops and fast food outlets) situated very close to schools (Kelly, et. al., 2007). The evidence examined for this review suggests that effective strategies where unhealthy behaviours (e.g. smoking, alcohol consumption and obesity) are concerned usually need more than education and information, they also require taxation, regulation, planning policy and other public health measures designed to ensure that persons feel supported to exercise control over their lives and to feel capable of changing their behaviour.

- There is need for interconnected policy across sectors and levels of intervention to enhance the possibility of effectiveness in improving child and youth health outcomes.

DISCUSSION & RECOMMENDATIONS

DISCUSSION AND RECOMMENDATIONS

The policy and research studies reviewed strongly endorse a whole government approach to ensure coherent action is taken across all sectors of government to redress the health inequities which exist. The review findings also indicate that the optimum approach to reduce health inequalities is to focus on wealth, income and resource redistribution from the most affluent to the less well-off sections of society. The TASC Report (Burke and Pentony, 2011) provides a guide as to how this redistribution could occur in Irish society. In unequal societies, where significant wealth redistribution is not being pursued, policies and practices tend to impact on the mediating factors associated with poor socio-economic circumstances in childhood while the socio-economic circumstances are left broadly unaddressed. Sometimes these initiatives are shown to be partially effective and with some groups more than others. However, overall the review indicates that there is a dearth of knowledge at national and international levels on interventions that are effective at tackling health inequalities. It is also recognised that interventions may be so culturally relevant that what might be shown to be effective in one context or with one gender or one group, may not be so in another context, or with another gender or group.

The review conducted provides support for making universal access to primary health care a priority into the future and for protecting the social and health sectors particularly, from austerity demanded cuts.

The review conducted provides support for making universal access to primary health care a priority into the future and for protecting the social and health sectors particularly, from austerity demanded cuts. In the Republic of Ireland a decade of economic growth failed to produce reductions in health inequalities (IPH, 2009). The Irish research evidence demonstrates that the rapid and intense economic downturn is creating living conditions that are damaging to health, most particularly for poor and vulnerable members of society. In this context and as highlighted by the IPH (2009), gathering best evidence on tackling health inequalities and reconfiguring what might now need to be done has never been more important. There is a lack of evidence of the health inequality impact of existing policies and interventions in the Irish context. While some of these may be less than effective, there is also the real possibility in the current climate that their impact is undermined by policies and interventions which are actually widening the social gradient. In this context evaluating the health equity impact of policies is generally more important than ever.

The life-course emerges quite strongly in the review as providing a way to act on the social determinants of health. In this context early childhood (pre-pregnancy, pregnancy and early childhood development) is also emphasised in both research and policy as a key stage in life when concentrated action is needed but it also has to be supported by action at other stages of life. High quality, affordable, early years, integrated education and childcare and parental support are most often identified as providing the foundation for levelling the social inequities that give rise to health inequalities. Special efforts are also required to ensure that those most in need are included in this provision. In this context effective measures to encourage and support breastfeeding practice generally, but also particularly among lower socio-economic groups of women and younger women, need to be strengthened in the Irish context. Greater state assistance would be

welcome to help families meet the high costs of childcare particularly when these costs prohibit parents from taking up good employment opportunities. Wrap around supports and easily accessed services before as well as during pregnancy and the first few years of life appear to make up part of a strategy most worthwhile pursuing in the Irish context. Early childhood education in Ireland relative to other European contexts is significantly under-resourced (0.1% of GDP compared to 0.5% on average) (DCYA, 2014). Action to reduce poverty in childhood is also needed, considering that child poverty remains high in Ireland and it significantly impacts on health but also so many other outcomes throughout life. While harnessing social and cultural capital can help, it is important to note as a result of this review, that persons' families and communities' abilities to harness the capitals at their disposal for their health vary by a range of factors, most notably migrant status, social class, sexual orientation and location.

The findings in many studies also reveal that while individuals have personal resources to make healthy choices, the influence of social and economic determinants exercises considerable bearing on this. The less personal resources individuals have, the more crucial it is that they have collective resources in the form of good public policy, welfare provision and accessible good quality services to complement their efforts. Concerted action on preventable health hazards are needed at societal and community levels by government and other stakeholders to assist people making health choices. Considering the available Irish data on children and young people's health; alcohol, tobacco control and food consumption are areas which can justifiably be targeted for such sustained action in Ireland. As the people at the bottom of the social gradient need the greatest support to live healthy lives, policies driven by the principle of proportionate universalism (i.e. universal provision to reduce stigma but allowing for a greater intensity of action and effort to assist those who need it

most) make good sense. Findings from the review support proofing all policies for their impact on health inequalities, considering the connections between many different social policies and health outcomes, which are well documented in the literature. The international and Irish evidence in the review indicates that positive experiences of formal education and good education attainment, especially among mothers can protect families from poor health and wellbeing. Improving the education and employment chances of poorer women would thus seem to be a worthwhile strategy to adopt. While employment offers protection from ill-health, poor quality and low paying employment does not, as the evidence from the review clearly shows that this is also strongly associated with poor family health and wellbeing. Pursuing work first policies which emphasise employment in any available job are, based on the evidence accumulated for this review, highly unlikely to address poor health outcomes. In this context, health first employment policies have been advocated as possibly more beneficial.

HEALTH INEQUALITIES AND YOUTH INTERVENTIONS

Youth interventions are ideally placed to play a part in supporting young people to make healthy choices, in advocating on behalf of young people and in empowering young people to make their voices heard and to influence policy and practice in accordance with their needs. Youth services are crucial to:

- Helping to build the resilience of poor young people and their communities and to contribute to harnessing social capital to address what may be harmful influences or significant risks to health in young people's surroundings
- Sustaining and prolonging the benefits of early intervention efforts into childhood middle childhood, adolescence and young adulthood
- Enabling and empowering young people in their interactions, relationships and

capabilities with societal systems essential to their health

- Advocating for accessible, affordable and high quality sexual and reproductive health services for all young people but also highlighting that good adolescent health needs a broader complement of services that stretch well beyond sexual health provision.
- Lobbying government to address youth unemployment and to monitor that opportunities provided, are good quality and conducive to good health. The evidence compiled for this review indicates that low paying employment and poor quality training and employment may not protect families from experiencing poor health and wellbeing in the way that good quality training and employment do (e.g. Strazdins et. al., 2010).

IRISH RESEARCH – STRENGTHS AND GAPS

Studies of child and youth health inequalities tend to rely heavily on longitudinal datasets, of which there are a very limited number in Ireland and as a result limited research expertise specific to the field of longitudinal research. However, *Growing Up in Ireland* (GUI) and the *Health Behaviour of School Aged Children* (HBSC) provide considerable potential in this regard in terms of exploring the links between factors (social class, education, race and ethnicity, employment, welfare dependence, sexual minority status) and health outcomes. Findings from the HBSC are widely distributed and because 43 countries are involved, cross-national research studies are also possible. The large scale of the survey and the data collected enables trends in children and young people's health behaviours to be compared with the other participating countries, clearly indicating how well or poorly we are doing in Ireland by comparison. As the HBSC survey conducted in 2010 was the fourth in Ireland, trends in health behaviours among children and young people and how they are changing or not over time can also be monitored. It is for such reasons that studies based on the HBSC dataset

were accessed in the systematic search conducted for the purpose of this review, whereas most other studies of health inequalities in Ireland were only accessed by conducting a grey literature search. Because *Growing Up in Ireland* follows the progress of a very large sample of children over time, it offers considerable opportunity for exploring the factors impacting on health and wellbeing throughout the different stages of children's development. The research opportunities offered by this dataset are only beginning to be realised and as further waves of data collection are completed, some gaps in information on healthcare access and healthcare inequalities in Ireland relative to other contexts and indeed for different age categories of children and young people as distinct from adults, may be filled.

Qualitative research, if conducted sensitively and ethically, has potential to provide insights into the part played by such norms and values in particular age groups and communities, which are interacting with health inequalities and which ones may be most useful and amenable to change by policy and intervention.

The value of qualitative data generated by ethnographic research studies in families, schools and other settings might be also be considered in the Irish context in terms of enhancing understanding and uncovering how health inequalities are experienced on a day to day basis and how interventions to impact these inequalities are experienced. The IPH (2009) has pointed to the evidence indicating that cultural and societal norms and values do interact with health inequalities, but that they tend to be neglected in

research and policy possibly for ethical reasons or because they are perceived to be not amenable to change. Qualitative research, if conducted sensitively and ethically, has potential to provide insights into the part played by such norms and values in particular age groups and communities, which are interacting with health inequalities and which ones may be most useful and amenable to change by policy and intervention.

Efforts being made to standardise data gathered between health and social care agencies are very welcome and beneficial for research purposes. It also makes sense at a time where there are resource shortages for the conduct of research, to ensure that the national administrative databases required for research purposes are fit for purpose and include enough items to capture the information most needed about groups in the population. Disaggregated data collection and analysis of this would provide greater insight into differences experienced by groups in accessing healthcare and how cost might operate as a barrier for some groups in this regard. In 2010 an Expert Group report on financing the health sector stated that some information systems within the Irish health sector were not 'fit for purpose' and that basic data on the public and private systems of healthcare could only be obtained with considerable effort (Expert Group, 2010, p.107). It also stated that better information systems were necessary to facilitate rational decision making and to ensure satisfactory standards of public accountability and transparency in the system. It is recognised in the Government's *Healthy Ireland Framework* that ongoing efforts need to be made to ensure that good quality data beneficial for better planning and monitoring of outcomes and for research purposes into the future is gathered. While building information and an evidence base, which can be effectively translated to inform policy and intervention is important, the challenge, as highlighted by the IPH (2009) is also to ensure that services are aware that they are working to deliver reductions in health inequalities and that they are being supported and resourced to do so.

Another key issue is that Irish research studies

conducted are not so easily accessible and more effort needs to be put in to making such data and the findings they generate, available in a timely manner. The establishment of a health inequalities institute as in the UK and a child health inequalities inventory or repository would be very welcome in this regard. The review also provides support for the TASC (Burke and Pentony, 2011) recommendation that the Central Statistics Office produce regular reports on health inequalities to monitor progress being made on the reduction of key health inequalities in the general population.

Considering the emphasis put on early childhood intervention in the review, baseline data and targets need to be developed to help assess progress in child health and development, particularly in terms of what might be expected of young children at different stages of development. Disparities made evident could be used to inform policy and practice based interventions, which then need to be made robust enough to target those most at need. A number of groups of children and young people in the population (young Travellers, young migrants, young carers, looked after children, young homeless persons, young people with disabilities etc.) have been identified in research studies included in this review as in need of more targeted health and wellbeing initiatives.

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Despite being a very vulnerable group in the population, there is a dearth of data on the health outcomes of the children in Ireland who experience the care system. The health status of this group has not been differentiated from that of the general population and this would be an issue worthy of investigation, considering the association between lower socio economic status and experience of the care system. Research focused on the impact of the economic crisis and the resulting austerity, on the health and wellbeing of the most vulnerable groups in the population, needs to be conducted. Its findings should be used to positively correct any negative outcomes detracting from giving children the best start in life, which if left unaddressed, will only deleteriously impact on their health and life chances in future. While resilience is a theme, which emerges significantly in the international studies reviewed, we know very little as to how resilience is understood or practiced in Irish contexts among groups of young people and how this relates to health outcomes. A greater understanding and knowledge base in this regard might facilitate interventions designed to build resilience among children and young people to cope better with adverse conditions in life impacting on their health status. Social capital is another prominent issue in the literature reviewed in terms of its potential use in reducing health disparities and promoting wellbeing. Considering that its potential in improving health outcomes in the Irish context has been identified as necessitating further investigation (Baland & Wilde, 2004) it is not so prominent in the Government's *Healthy Ireland Framework*. In this context a research agenda devised to increase our understanding of the interconnections between social capital and health for poorer children and young people in Ireland is worthy of consideration. The understandings gained might be used to inform effective interventions designed to help some groups of young people make better use of their social networks to improve their wellbeing and life circumstances at local levels.

CONCLUDING NOTE

As noted in *The Spirit Level* (Wilkinson and Pickett, 2009) though the effect of social inequality is felt most by those at the bottom of the social scale, everyone does better in a more equal society. The challenges seem to be in relatively unequal societies, to build solidarity and greater cohesion and to make the choices required to close the inequality gap. In this context and to build the will for concerted action, political parties, policy actors and members of the Irish public need to be convinced of the harm done to all; individuals, communities and wider society, by not tackling health inequalities.

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APPENDIX 1 SEARCH STRATEGY FOR SYSTEMATIC REVIEW OF TWO ACADEMIC DATABASES

	SocIndex Citations	Sociological Abstracts - ProQuest Citations	Total
SEARCH #1: "Health Equalit*" OR "Health Inequalit*" OR "Health discriminat*" OR "Health prejudice*" OR "Health disparit*"	2,148	1,503	11,710
SEARCH #2: Teenage* OR "Young adults" OR Youth OR Children	180,620	128,989	1,641,611
SEARCH #3: Audit OR intervention OR evaluation OR practic* OR initiative*	348,686	167,350	516,036
SEARCH #1 AND #2 Limits applied ^a Number of articles relevant	351 119 21	254 222 111	605 341 132
SEARCH #1 AND #2 AND #3 Limits applied ^b Number of articles relevant	172 123 21	78 48 10	250 171 31

a= Limited by: Publication date (2000- 2013); Language (English); Category (Humans); and Type (Scholarly, peer-reviewed papers).

b= Limited by: Publication date (2000- 2013); and Language (English).

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