



Research Paper 04/08

February 2008

CHILD HEALTH INEQUALITIES AND THE LINKS TO CHILD POVERTY

This paper looks at the relationship between child health inequalities and child poverty and includes a summary of a UNICEF international comparison of child well-being indices, focusing on those most relevant to child health inequalities. The causes of child health inequalities are described and strategies to tackle such inequalities are outlined including the 'Life Course' approach advocated by the World Health Organisation. The main government policies and strategies on child poverty for the UK and Republic of Ireland are briefly summarised and an EU good practice project entitled 'Closing the Gap' is outlined.

Library Research Papers are compiled for the benefit of Members of The Assembly and their personal staff. Authors are available to discuss the contents of these papers with Members and their staff but cannot advise members of the general public.

SUMMARY OF KEY POINTS

The World Health Organisation (WHO) propose that the greatest threats to health in both developing and developed countries are the consequences of poverty and socio-economic inequity and that these will remain the major threats to the health of children and young people even in developed countries¹. In terms of reducing the direct effects of child poverty on health, the picture is complex as alleviating child poverty requires the alleviation of family poverty and also requires raising the living standards of those who are poor and do not yet have children².

Section 2 of this paper outlines the various accepted causes of child health inequalities. These can be seen as the outcome of differences in exposure to intermediate risk factors and these are typically grouped into³:

- Material/environmental e.g. housing, pollution;
- Service-related e.g. access to healthcare;
- Psychosocial e.g. parental interest, stress at school; and
- Behavioural e.g. active/passive smoking, nutrition.

Wagstaff et. al. (2004)⁴ describe the distinction between 'proximate' and 'underlying' determinants of child health. 'Proximate' determinants affect child health directly e.g. care during pregnancy and childbirth, feeding practices and preventative activities, while those 'underlying' affect child health indirectly through their effect on the 'proximate' determinants e.g. mother's knowledge, household income, access to health facilities.

An international comparison of child well-being in rich countries by UNICEF (2007) is summarised in Section 3 of this paper. UNICEF⁵ revealed that, based on the indicators used, the UK is the worst place to be a child out of 21 rich countries. Section 3 of this paper contains a summary table illustrating how the UK and Ireland compare to the best and worst countries for each indicator measured focusing on those that appear to be most relevant to poverty and its influence on child health inequalities.

With reference to tackling child health inequalities, three basic strategies can be identified⁶:

1. Reduction of socioeconomic inequalities by 'levelling up' living standards
2. Interventions aimed at improving the health of all children;
3. Interventions aimed specifically at improving the health of children in lower socioeconomic groups.

¹ WHO Europe, European strategy for child and adolescent health and development (2005), *Introduction*

² Kober, C. (2003), *Health Matters*, **53**, pg 20

³ Mielck, A. et. al. Children, an important target group for the reduction of socioeconomic inequalities in health, Ch. 9 in Mackenbach, J. and Bakker, M., *Reducing Inequalities in Health – A European Perspective*, Routledge, London and New York (2002)

⁴ Wagstaff, A. et. al. (2004) Child Health: Reaching the Poor, *American Journal of Public Health*, **94**(5), 726-736

⁵ UNICEF Innocenti Research Centre, Report Card 7 (2007)

⁶ Mielck, A. et. al. Children, an important target group for the reduction of socioeconomic inequalities in health, Ch. 9 in Mackenbach, J. and Bakker, M., *Reducing Inequalities in Health – A European Perspective*, Routledge, London and New York (2002)

Section 4 of this paper focuses on addressing child health inequalities including the work of Dr Nick Spencer, Emeritus Professor of Child Health at the University of Warwick on three levels of interventions addressing downstream, midstream and upstream factors⁷ and the *life-course* approach advocated by WHO⁸, which focuses on optimal physical and psychological development from conception to adulthood.

Section 5 of this paper summarises main current UK and Ireland government policy and strategy on child poverty as it relates to child health inequalities. *Lifetime Opportunities* (OFMDFM, 2006) is the current Anti-Poverty and Social Inclusion Strategy for Northern Ireland which focuses on a number of elements including tackling health inequalities and breaking cycles of deprivation by advocating a 'lifetime approach'. OFMDFM have also published *Our Children and Young People, A Ten Year Strategy for Children and Young People in Northern Ireland 2006-2016* the aim of which is to ensure that by 2016 all of Northern Ireland's children are fulfilling their potential.

In the Republic of Ireland, Chapter 2 of the *National Action Plan for Social Inclusion 2007-2016*⁹ focuses on children and the main points and goals relevant to this paper are summarised in this paper. Health inequalities in the Republic of Ireland manifest themselves in a higher incidence of low birth weight and premature mortality among children from lower socio-economic groups and through emerging issues such as exercise, nutrition and obesity.

In England, since 1997, the Labour government has responded with a range of initiatives. More recently, its 2004 White Paper, *Choosing Health: Making healthier choices easier*, placed a strong emphasis on the importance of personal choice and changing individual lifestyles and behaviour to ensure better population health, with a special focus on disadvantaged communities. As regards income the strategy has been to focus on primarily targeted poverty-reduction programmes, rather than measures to tackle income inequality more widely.

Community-based interventions have included substantial investment in a range of programmes intended to improve health and well-being in disadvantaged communities including twenty-six Health Action Zone programmes and other Healthy Living Centres. The challenges that still exist include reducing conception rates among teenagers, reducing obesity among children and reducing smoking prevalence in routine and manual socio-economic groups. The Department of Health note that progress has been made on teenage pregnancy; road accident casualties; smoking; fruit and vegetable consumption; housing; school sport; proportion of children living in poverty; and number of homeless families.

The Welsh Assembly government, in 2005, published *A Fair Future for our Children, The Strategy of the Welsh Assembly Government for Tackling Child Poverty* (2005). It believes that tackling child poverty ultimately benefits the whole community leading to healthier, higher skilled adults and lower crime rates. The aim is to tackle poverty through mainstream services, backing this up with specific targeted support when needed. The plan aims to tackle the following three areas of child poverty, income poverty, participation poverty and service poverty. It is under the heading of service poverty that actions concerning health inequalities are described.

⁷ WHO interview with Dr Nick Spencer,
www.euro.who.int/socialdeterminants/socmarketing/20051214_1

⁸ WHO Europe, pages 6-12

⁹ www.socialinclusion.ie/NAP_inclusion_06.html

Improving Health in Scotland: The Challenge was published by the Scottish Executive in 2003 and provided a framework for improving health for the whole population and tackling health inequalities. It was proposed that improved health would require all the different policy strands, and the different action programmes for improving health, lifestyles and life circumstances to be linked and, where possible, integrated. A life course approach, as advocated by WHO, was proposed to support people at critical times in their lives. To support this new focus and enable closer linkages and partnership working for health improvement, four major themes were proposed:

- Early Years;
- The teenage transition;
- The workplace; and
- Community-led.

Section 6.1 describes *Closing the Gap*, a three year (2004-2007) European initiative based on a partnership of 21 national public health agencies and institutes from across Europe that are working together to develop a shared understanding of health inequalities and how to reduce them. Exemplar practices at a local level, some of which are described further in this paper, have been collected based on a set of quality elements, developed and discussed for the area of tackling health inequalities and all exhibit specific selection criteria.

Section 6.2 of this paper includes a table outlining a sample of somewhat older effective interventions extracted from tables 9.2 and 9.3 of the following book,

Mielck, A. et. al. Children, an important target group for the reduction of socioeconomic inequalities in health, Ch. 9 in Mackenbach, J. and Bakker, M., *Reducing Inequalities in Health – A European Perspective*, Routledge, London and New York (2002).

Most of the reported effective interventions presented in the table have been conducted in the UK and the health problems most often targeted are mental health and accidents and are often delivered by professional staff working in the settings in which children live and their schools.

CONTENTS

1. Introduction	1
2. The Causes of Child Health Inequalities	2
2.1 Proximate Determinants	2
2.2 Underlying Determinants	3
3. International Comparison of Child Health Inequality Indices	4
4. Tackling Child Ill health and Health Inequalities	6
4.1 Overview of Strategies and Interventions	6
4.2 A Life Course Approach.....	7
5. UK and Ireland – Government Policy and Strategy on Child Poverty as it Relates to Child Health Inequalities	11
5.1 Northern Ireland	11
5.2 Republic of Ireland	13
5.3 England.....	15
5.4 Wales	17
5.5 Scotland	18
6. Europe-Wide Strategies/Good Practice for Action to Tackle Child Health Inequalities	20
6.1 EU Project – Closing the Gap	20
6.2 Other Evaluated Initiatives	22

1. INTRODUCTION

The World Health Organisation (WHO) propose that “*Good health from prenatal life to adolescence is a resource for social and economic development*”¹⁰ and that the greatest threats to health in both developing and developed countries are the consequences of poverty and socio-economic inequity and that these will remain the major threats to the health of children and young people even in developed countries.

The burden of ill-health in children and young people has greater significance than that in adults as it can have a longer life-time effect and wider impact on society. Ill health in children and young people, especially when it is of medium to long-term duration includes¹¹:

- Discomfort and pain for the child;
- Loss of normal play and socialisation, thus impeding normal development;
- Loss of education, which in turn jeopardises career and income prospects;
- Distress for parents and possible loss of their income;
- Requirement to provide suitable health and social services;
- Consequences on future generations, and
- In severe cases, a lifetime burden on a country’s social welfare system.

In terms of reducing the direct effects of child poverty on health, the picture is complex as alleviating child poverty requires the alleviation of family poverty and also requires raising the living standards of those who do not yet have children but who are poor otherwise children will continue to be born into poverty¹². The following list describes some of the determinants that influence child health and development and is extracted from Figure 1 of the WHO Report referenced in footnote 2 below:

- Poverty;
- Socially isolated living;
- Unemployment of parents;
- Deficient law;
- Harmful environment;
- Lack of day care;
- Lack of influence and participation;
- Negative market forces;
- Disease and injury;
- Negative media;
- Adverse cultural development; and
- Uncertain future prospects.

Budrys (2003)¹³ refers to the concept of ‘chronic disadvantage’,

“The issue of lifetime advantages associated with higher levels of education and social class brings us to an added dimension – the passage of time, which is reflected in age....Behaviour in adulthood can be traced to the circumstances that a person experienced during childhood... There is a high degree of association between such

¹⁰ WHO Europe, European strategy for child and adolescent health and development (2005), *Introduction*

¹¹ WHO Europe, Health Evidence Network Report (HEN) (June 2005), What are the main factors that influence the implementation of disease prevention and health promotion programmes in children and adolescents?

¹² Kober, C. (2003), *Health Matters*, **53**, pg 20

¹³ Budrys, G. (2003) *Unequal Health – How Inequality Contributes to Health or Illness*, Rowman and Littlefield Publishers Inc. (USA), Ch. 10, pg 168

adult behaviours...as smoking, alcohol consumption, physical activity, obesity and the social class of origin”.

2. THE CAUSES OF CHILD HEALTH INEQUALITIES

Health inequalities can be seen as the outcome of differences in exposure to intermediate risk factors and these are typically grouped into¹⁴:

- Material/environmental e.g. housing, pollution;
- Service-related e.g. access to healthcare;
- Psychosocial e.g. parental interest, stress at school; and
- Behavioural e.g. active/passive smoking, nutrition.

Wagstaff et. al. (2004)¹⁵ describe the distinction between ‘proximate’ and ‘underlying’ determinants of child health as a useful framework for addressing this issue. ‘Proximate’ determinants affect child health directly e.g. care during pregnancy and childbirth, feeding practices and preventative activities, while those ‘underlying’ affect child health indirectly through their effect on the ‘proximate’ determinants e.g. mother’s knowledge, household income, access to health facilities. The following information on these determinants is summarised from their paper.

2.1 PROXIMATE DETERMINANTS

A good deal is now known about the proximate determinants of child health i.e. the behaviours, preventive practices, and interventions that can improve the health of and reduce deaths among children as follows:

Preventive Activities

In all aspects of nutrition, the poor tend to be worse off. Low birthweight is linked to malnutrition of the mother before and during pregnancy, and micronutrient deficiencies in mothers increase morbidity and mortality among young children. Maternal nutritional status and child malnutrition is significantly worse in poor countries, and among the poor within countries. The only feeding pattern that has a gradient that is favourable to the poor in the developing world, but not in industrialised countries, is breastfeeding which decreases with socioeconomic status.

Hygiene, the use of safe water, and the immediate environment where the child lives, including indoor air pollution, are also important proximate determinants of child health where the poor tend to be disadvantaged.

A number of other key preventive activities are also known to improve child health, for example, appropriate antenatal care and assistance at birth; Birth spacing and measles immunisation. Each of these preventive activities tends to display a socioeconomic gradient both between and within countries.

Care During Illness

¹⁴ Mielck, A. et. al. Children, an important target group for the reduction of socioeconomic inequalities in health, Ch. 9 in Mackenbach, J. and Bakker, M., *Reducing Inequalities in Health – A European Perspective*, Routledge, London and New York (2002)

¹⁵ Wagstaff, A. et. al. (2004) Child Health: Reaching the Poor, *American Journal of Public Health*, **94**(5), 726-736

Correct home management of childhood illnesses involves a number of important family practices, including recognising when professional care is needed. Poor or delayed care-seeking has been identified as a contributor in up to 70% of child deaths and is associated with socioeconomic status. For caregivers who take the child to a provider, additional practices are involved in compliance with the treatment and advice they are given about how to care for the child and this compliance is also associated with parents' socioeconomic status.

2.2 UNDERLYING DETERMINANTS

Wagstaff et. al. propose that looking deeper into the causes of child health inequalities worldwide is crucial to identifying the failures of policies to date and to devising successful policies to combat inequalities in child health for the future. They propose that although most of the key proximate determinants of child health are worse among the poor does not necessarily mean that it is low income that is the only cause of these inequalities as the poor are disadvantaged compared with the better-off on a number of underlying determinants of child health.

Financial Barriers

Income - Measures of child health tend to improve with income, at both the country level and the child level. Most proximate determinants, as described above, tend to improve with higher income. It is not just a household's total income that matters but also the degree of the woman's control over its use.

Budrys (2003)¹⁶ notes that countries that enjoy the longest life expectancy also have the lowest levels of income inequality, with Japan providing the leading example, however infant mortality is even more sensitive to income inequality than adult health.

"In a study of infant mortality in twenty six developed countries, researchers found infant mortality to be directly associated with income inequality... an increase in the income levels of households reduces infant mortality in poor countries, but lowering income inequality reduces infant mortality in rich countries...the higher the share of the income that goes to the richest 5 percent, the higher the infant mortality rate for the country as a whole" (Ch. 11, pg 190).

Budrys (2003)¹⁷ notes

"the effect of socioeconomic differences on health status varies by age. Differences are large at the earliest stages during the prenatal period and infancy...this is the period during which humans are most vulnerable and susceptible to environmental influences... diminish during adolescence, grow increasingly larger during the adult years, and decrease again in old age...the disadvantages associated with lower economic status are cumulative over the life-time".

Price - It is known that a higher monetary price for health care tends to reduce, or at least delay, health service use, especially among the poor. Cost also tends to be a factor in determining the demand for other proximate determinants of child health, e.g. higher food prices have negative impacts on child survival and malnutrition.

Health Care Provision

¹⁶ Budrys, G. (2003) *Unequal Health – How Inequality Contributes to Health or Illness*, Rowman and Littlefield Publishers Inc. (USA), Ch. 11, pg 190

¹⁷ Budrys, G. (2003) *Unequal Health – How Inequality Contributes to Health or Illness*, Rowman and Littlefield Publishers Inc. (USA), Ch. 10, pg 169

There are several key steps to ensuring accessible and good-quality health services and on each step the poor are disadvantaged.

Geographic accessibility - Both distance and travel time have a significant impact on utilisation and health outcomes. The poor tend to have to travel further to get to health facilities and, owing in part to the extra distance but also the difficulty of transportation, longer.

Availability of human and material resources - Services may be geographically accessible, but essential inputs, such as drugs, vaccines, contraceptives or trained staff, may be unavailable or in short supply.

Relevance of services - Studies have reported fewer child-specific services being offered by facilities serving poor rural areas than by facilities serving better-off urban areas.

Timeliness of services - Certain key health services such as emergency obstetric care or referral services for severely sick children, and also immunisation and other routine preventive services must be delivered in a timely manner. Timeliness of service use tends to be worse among the poor, but these inequalities reflect both differences in care-seeking behaviours on the part of households and differences in provider behaviour.

Technical quality - The technical quality of case management of childhood illness by health professionals varies considerably. In part, this reflects lack of human resources.

Maternal Education

The socioeconomic inequalities in maternal education are large both across countries and within them. In many countries, the mother's education has been found to increase child survival and to decrease child malnutrition, even when other determinants are held constant as most proximate determinants usually increase with higher levels of maternal education, including complementary food nutrient intake among infants; good hygiene; the timing of antenatal consultation; the use of well-baby clinics; the likelihood of a child being immunised; and the likelihood of a caregiver seeking care for a child with fever.

Other Underlying Determinants

A variety of social norms and practices influence women's access to resources, both inside the household and in the community and also influence their decision-making power in the household. These norms influence their capacity to seek health care and to devote time and energy to child care.

3. INTERNATIONAL COMPARISON OF CHILD HEALTH INEQUALITY INDICES

In 2007 UNICEF published *An overview of child well-being in rich countries*^{18, 19}. The Report measured child well-being under six different dimensions as follows; material well-being, health and safety, education, peer and family relationships, behaviours and risks, and young people's own subjective sense of well-being. Based on the indicators used, the Report states that overall the UK is the worst place to be a child out of 21 rich countries and it finds itself in the bottom third of the rankings for five of the six dimensions measured. By the same measure The Netherlands heads the table for overall child well-being. The following summary table illustrates how the UK and Ireland compare to the best and worst countries in each category

¹⁸ UNICEF Innocenti Research Centre, Report Card 7 (2007)

¹⁹ Netherlands, Sweden, Denmark, Finland, Spain, Switzerland, Norway, Italy, Ireland, Belgium, Germany, Canada, Greece, Poland, Czech Rep., France, Portugal, Austria, Hungary, United States and UK

measured, focusing on the categories that appear to be most relevant to poverty and its influence on child health inequalities.

Dimension	Component Measured	Lowest	Highest	Average	UK	Ireland
Material Well-being	% of children who live in families earning less than half the national wage	2.4% Denmark	21.7% US	11.2%	16.2%	15.7%
Health and Safety	No. of babies dying before their first birthday (per 1000)	2.4 Iceland	7.3 Hungary	4.6	5.3	5.1
	% of children born weighing less than 2500g	3.1% Iceland	9.1% Japan	6.4%	7.6%	4.9%
	% of children immunised against preventable diseases	82% Austria	99% Hungary	92%	88%	82%
	No. of people under 19 years old who die from accidents and injuries (per 100,000)	7.6 Sweden	23.1 New Zealand	14.3	8.3	15.0
Behaviours and Risks	% of 11-15 years olds who smoke at least once a week	6.1% Greece	16.4% Germany	11.0%	13.1%	9.6%
	% of 11-15 years olds who have been drunk more than twice	8.0% France	30.8% UK	15.4%	30.8%	13.8%
	% of 15 year olds who have smoked cannabis in the last year	4.2% Greece	40.4% Canada	21.4%	34.9%	20.0%
	No. of 15-19 year olds per 1000 who have had a baby	4.0 Japan	46.0 US	16.0	28.0	15.0
	% of 15 years olds who have had sex	15.1% Poland	38.1% UK	23.6%	38.1%	No figure available
	% of young people who eat fruit every day	21.5% Finland	47.8% Portugal	34.2%	26.7%	32.6%
	% of young people who eat breakfast every school day	45.6% Greece	80.8% Portugal	64.4%	56.1%	71.8%
	Average no. of days that young people had done 1hr of exercise in past week	3.1 days Belgium, France	4.5 days Ireland	3.9 days	4.2 days	4.5 days
	% of young people who are overweight	7.1% Poland	25.8% US	12.9%	15.8%	12.1%

4. TACKLING CHILD ILL HEALTH AND HEALTH INEQUALITIES

4.1 OVERVIEW OF STRATEGIES AND INTERVENTIONS

Children in the European Region today benefit from better nutrition, health and development than ever before, however, there are striking inequalities in health status and access to health services across the 52 countries in the Region, with over 10-fold differences in infant and child mortality rates. Inequalities are also growing within countries. Emerging threats during late childhood and adolescence, such as obesity, and mental health problems, coexist in the Region with malnutrition, perinatal problems and infectious diseases. The incidence of HIV/AIDS among young people is rising in several countries and injuries and violence pose a threat to children and adolescents in all countries²⁰.

Many disease prevention and health promotion programmes are directed at the health of children and young people to prevent both immediate problems (mortality and morbidity) and long term problems. However, even where there is evidence to support such public health interventions, implementation in different settings and countries has met with varying degrees of effectiveness and sustainability.

Three basic strategies to reduce childhood health inequalities can be identified²¹:

1. Reduction of socioeconomic inequalities by 'levelling up' living standards
2. Interventions aimed at improving the health of all children;
3. Interventions aimed specifically at improving the health of children in lower socioeconomic groups.

Dr Nick Spencer, Emeritus Professor of Child Health at the University of Warwick has predominantly focused his academic work on poverty and child health and describes three levels of interventions addressing²²:

- Downstream factors, such as low birth weight and mental health, including, e.g. parenting programmes;
- Midstream factors, including home and school environments, e.g. promoting smoking cessation among parents, healthy eating and sports opportunities in schools; and
- Upstream factors, including structural factors in the social and economic fabric by influencing policies to address income inequalities, structure of education etc.

Dr Spencer notes that there is a lack of awareness among health workers of the relationship between socioeconomic policies and health and of the importance of addressing the midstream and upstream determinants of health.

Wagstaff et. al.²³ note that

"income has pervasive effects on child health, operating through a number of key proximate determinants and interacting with other underlying determinants. Macro- and microeconomic policies that succeed in raising average income, without adverse effects on its distribution, are thus likely to have payoffs in terms of improved child health outcomes among the poor".

²⁰ WHO Europe, European strategy for child and adolescent health and development (2005),
Introduction

²¹ Mielck, A. et. al. Children, an important target group for the reduction of socioeconomic inequalities in health, Ch. 9 in Mackenbach, J. and Bakker, M., *Reducing Inequalities in Health – A European Perspective*, Routledge, London and New York (2002)

²² WHO interview with Dr Nick Spencer,
www.euro.who.int/socialdeterminants/socmarketing/20051214_1

²³ Wagstaff, A. et. al. (2004) Child Health: Reaching the Poor, *American Journal of Public Health*, **94**(5), 726-736

They cite the example of 'conditional cash transfers' including the *Programa de Asignacion Familiar* (family allowance program) in Honduras which provides a cash payment to poor households with children or pregnant women that is contingent on continued prenatal checkups, growth monitoring and vaccinations. A similar Education, Health and Nutrition program (PROGRESA) in Mexico has been found to significantly increase the use of public health clinics for preventative care, including prenatal care and child nutrition monitoring. It is estimated to have caused a 12% reduction in the incidence of illness among under 5's and an increase of about one-sixth in mean growth per year among children aged 12-36 months who received multimicronutrient food supplements as well as the conditional cash transfers.

Evidence exists to support use of the following disease prevention and health promotion interventions²⁴:

- Immunisation programmes;
- Folic acid supplementation during pregnancy;
- Promotion of breast feeding;
- Prevention of sudden infant death syndrome;
- Promotion of use of cycle helmets, child restraints, etc.;
- Smoking cessation aids;
- Screening for post-natal depression; and
- Psychosocial interventions for those at high risk of mental health problems.

The factors that affect the successful implementation of such programs are:

- National planning, political factors and capacity;
- Availability of data about the target population and intervention impacts;
- Influence of socio-economic factors and special considerations regarding the age of target population;
- Burden of the health problem to society, family and individual;
- Use of intervention in a multifactorial setting;
- Communication strategies through media and school to reach vulnerable and minority groups; and
- Engagement of all levels of the society (from government to individual) in the process.

4.2 A LIFE COURSE APPROACH

4.2.1 OVERVIEW

WHO propose a *life-course* approach for interventions to tackle child ill health and health inequalities and the following information on this approach is extracted and summarised from the *European strategy for child and adolescent health and development (2005)*²⁵.

A life-course approach focuses on optimal physical and psychological development from conception to adulthood. The support provided to a child in the early years of life confers health benefits immediately and throughout the life course and should allow growth and development into a healthy, socially responsible and productive young person during the first two decades of life.

Life course research to date suggests that, to a differing extent across health outcomes, inequality develops as a result of various socially patterned exposures and behaviours starting

²⁴ WHO Europe, Health Evidence Network Report (HEN) (June 2005), What are the main factors that influence the implementation of disease prevention and health promotion programmes in children and adolescents?, *Summary*

²⁵ WHO Europe, pages 6-12

in early life. Improving social inequalities in adult health requires a range of targeted intervention strategies for infants, children, adolescents and adults, e.g. targeting interventions at young girls and women may improve not only their own health but that of their offspring²⁶.

The following sections, summarised from the WHO *European strategy for child and adolescent health and development*, discuss the key health-related issues at each stage of the child's development.

4.2.2 BEFORE AND AROUND THE TIME OF BIRTH

Prior to conception much can be done to reduce unnecessary disability and ill-health through the application of interventions already known to be effective, for example, vaccination against rubella, avoidance of alcohol, smoking cessation and supplementation of folic acid around conception.

Teenage pregnancies and unwanted pregnancies are a significant risk factor for perinatal and infant mortality. Young mothers have a greater tendency to produce low-birth-weight babies which increases the risk of ill-health in the newly born child and in later life. Low birth weight may be an indication of inadequate maternal nutrition, although other factors play a part for example, smoking during pregnancy.

Access to essential obstetric and newborn care is vital, particularly where there are complications of pregnancy, labour and delivery. However, improvements in the socioeconomic circumstances for those at greatest risk, together with health promotion and preventive measures, are critical.

Breastfeeding is a highly effective means of improving infant well-being. Despite the fact that it is "low-cost", exclusive breastfeeding until the infant is about six months old is adopted by too few mothers in virtually all Member States.

WHO propose that policies, programmes and health systems should be in place to work towards the following targets:

- Pre-conception and pregnancy
 - planned and well-spaced pregnancies
 - folic acid supplementation
 - genetic counselling and advice
 - pregnancy free from tobacco, alcohol or drug misuse and abuse
 - adequate nutrition, including micronutrients
 - tetanus and rubella immunizations
 - preparation for parenthood
 - early confirmation of pregnancy
 - prevention of HIV infections and STIs;
- During pregnancy
 - access to quality antenatal care
 - prevention, detection and management of anaemia
 - prevention and treatment of infections, such as STIs
 - protection from exposure to hazardous substances
 - early detection and treatment of maternal complications and intra-uterine growth retardation
 - labour preparation;
- During delivery
 - safe delivery by a skilled birth attendant

²⁶ Ibid, Ch2, pg 48

- early detection and management of fetal complications
 - essential newborn care and resuscitation
 - obstetric care for complications
 - early mother-to-baby contact and breastfeeding initiation
 - special care and management for low-birth-weight and sick newborn babies
 - prevention of mother-to-child HIV transmission;
- During the first four weeks of life
 - continued exclusive breastfeeding
 - prompt detection and management of diseases in newborn infants
 - bonding with primary carer
 - immunization
 - prevention, detection, care and support for mothers with postpartum depression
 - prevention of mother-to-child transmission of HIV.

4.2.3 THE FIRST YEAR OF LIFE

Nutrition remains of paramount importance at all stages of development. Poor feeding practices can lead to diarrhoeal diseases and anaemia in infants and young children, for example, iron deficiency is a public health problem in many countries and can lead to impaired brain development in children.

In countries of the Region with higher infant mortality rates, infectious diseases such as acute respiratory infections, diarrhoea and other communicable diseases remain responsible for the major part of the burden of disease.

Passive tobacco smoke is a substantial threat to child health. Such exposure causes a wide variety of adverse health effects in children, including lower respiratory tract infections such as pneumonia and bronchitis, coughing and wheezing, worsening of asthma and middle ear disease, and may also contribute to cardiovascular disease in adulthood and to neurobehavioural impairment.

Immunisation remains of paramount importance. It is, moreover, one of the most cost-effective public health interventions available.

Early stimulation through interaction with primary carers and play is of vital importance in ensuring appropriate development of the cognitive potential of the child's brain and improving the child's social skills thereafter.

WHO propose that policies, programmes and health systems should be in place to work towards the following targets:

- Continued breastfeeding combined with appropriate complementary feeding from the age of six months;
- Stimulation through play, communication and social interaction;
- Early establishment of healthy eating habits;
- Access to safe food and clean water;
- Protection from indoor and outdoor pollutants;
- Full immunisation against the major childhood diseases;
- Prevention, early detection and management of the main communicable diseases;
- Prevention, detection and treatment of parasitic infections and infestations; and
- Detection and management of vision and hearing disabilities.

4.2.4 EARLY CHILDHOOD: GETTING READY TO ENTER SCHOOL

Poor feeding practices at this age can lead to poor physical growth and impaired cognitive performance. Conversely, an unhealthy hypercaloric diet can lead to overweight and obesity, and may establish unhealthy eating patterns for life.

Secondary tobacco smoke can have both an immediate effect on the young child's respiratory health, and a long-term impact resulting from prolonged exposure.

Environmental conditions influence the health and development of young children and those at greatest risk are among the most disadvantaged in their countries. Exposure to lead, substandard housing, poor air quality and undernutrition are all characteristics of disadvantaged communities. Children from poor families are more likely to suffer injuries from road accidents or in the home. Drowning and fire-related deaths predominate in younger, housebound children.

Child abuse and neglect during the first years of life manifest themselves in every country in the European Region. In 1996, the World Health Assembly declared violence in the family and community to be a growing health problem.

WHO propose that policies, programmes and health systems should be in place to work towards the following targets:

- Continued stimulation through play, communication and social interaction;
- Appropriate complementary feeding with continued breastfeeding for up to two years, leading to adequate varied diets with sufficient micronutrients;
- Early establishment of healthy eating habits;
- Access to safe food and clean water;
- Protection from indoor and outdoor pollutants;
- Full immunisation against major childhood diseases;
- Prevention, early detection and management of main communicable diseases;
- Prevention, detection and treatment of parasitic infections and infestations;
- Detection and management of vision and hearing disabilities;
- Detection of and attention to developmental difficulties and learning disabilities;
- Oral and personal hygiene;
- Avoidance of passive smoke;
- Prevention of child abuse and neglect; and
- Safe home and neighbourhood environment.

4.2.5 LATE CHILDHOOD: HEALTHY DEVELOPMENT IN THE APPROACH TO PUBERTY

As social interaction beyond the family develops, the school environment, peer pressure and the mass media become increasingly influential in establishing the young person's values, attitudes and behaviour patterns. Children of this age increasingly express their own food preferences and start to act independently with regard to their diet. Poor dietary habits become reinforced, thereby establishing eating patterns that will last well into adulthood.

Environmental conditions continue to be important. Improving the infrastructure and environmental circumstances of impoverished neighbourhoods would result in major health gains, and contribute to the sustainable development of the nations in the European Region.

Increased experimentation is a characteristic of children as they approach puberty. This can take the form of early substance abuse, usually cigarette smoking, or other risk-taking behaviours that can lead to accidents and injury.

WHO propose that policies, programmes and health systems should be in place to work towards the following targets:

Providing research and information services to the Northern Ireland Assembly

- Healthy lifestyles – regular exercise, good oral and personal hygiene, varied diet with adequate micronutrients;
- Prevention, early recognition and management of mental health problems;
- Detection and therapeutic management of sensory and learning disabilities;
- Opportunities to learn, play and socialize in a child-friendly environment;
- Protection from risky behaviours, including tobacco, alcohol and drug abuse, and unprotected sexual activity;
- Protection from passive smoking;
- Protection from exploitation and hazardous child labour;
- Prevention of child abuse and neglect;
- Promotion of healthy school environments that facilitate physical and psychosocial well-being;
- Safe home and community environment; and
- Control of inappropriate child-centred marketing.

4.2.6 ADOLESCENCE: A HEALTHY ADOLESCENT PREPARED TO ENTER ADULTHOOD

WHO propose that key health challenges during adolescence are injuries, sexual and reproductive health, unhealthy behaviours linked to the use of substances and to diet and physical activity, and mental health. Injuries, in particular those related to road traffic, are the leading cause of death among adolescents across the European Region, with mortality rates among boys in this age group being almost double those for girls.

5. UK AND IRELAND – GOVERNMENT POLICY AND STRATEGY ON CHILD POVERTY AS IT RELATES TO CHILD HEALTH INEQUALITIES

5.1 NORTHERN IRELAND

5.1.1 LIFETIME OPPORTUNITIES

Lifetime Opportunities (OFMDFM, 2006) is the government's current Anti-Poverty and Social Inclusion Strategy for Northern Ireland. The Strategy focuses on a number of elements including tackling health inequalities and also cycles of deprivation. *"Policy must break the cycle that results in children who are born into poverty developing into underachieving young people with limited aspiration and low levels of educational qualifications and skills. They in turn become working age adults living in low incomes often in poor health....They are also the adults most likely to be parents of children again born into poverty"*²⁷.

As has been advocated by WHO (see section 4.0 above), this Strategy also advocates a 'lifetime approach' including advocating policy to undermine the deprivation cycle which targets distinctive social need, including health inequality, at different times in people's lives, from early years through childhood, adult working life and later years²⁸.

Some of the specifics in the Strategy relating to tackling poverty-related child health inequalities are as follows:

*Early Years (0-4 years)*²⁹

- The overall goal should be about providing every child, regardless of social background, with the environment they need to fulfil their full potential. To that end the

²⁷ Lifetime Opportunities, OFMDFM, November 2006, pg 5

²⁸ Ibid, pg 21

²⁹ Ibid, pg 25-32

Strategy proposes Working towards “*enhancing support for early years by establishing Children’s Centres in the most disadvantaged areas of Northern Ireland*”³⁰;

- A Children’s Minister has been appointed and OFMDFM have launched a 10-year strategy for Children and Young People (see next section);
- Sure Start aims to improve the health and emotional development of young children and to support parents. The expansion and enhancement of Sure Start is set to happen through the Children and Young People’s Package enabling 12,000 more children access to the services of Sure Start. From September 2006 it was anticipated that there would be 7 new projects and 19 existing projects would expand their services. Sure Start is cited in literature as an example of good practice³¹ with the following caveats:
 - Its potential benefits will be mediated by other influences on childhood disadvantage e.g. it does not address material circumstances of the children;
 - It is cost limited; and
 - Its potential impact does not extend up the socioeconomic gradient, due to its very targeted nature at disadvantaged groups;
- The Northern Ireland Tobacco Action Plan identifies pregnant women as a main target group, and the Strategy acknowledges that it is important to address the issue of parent’s smoking; and
- A specific target for breastfeeding has been set – by 2025 70% of all infants will be breast-fed at one week after birth (50% by 2010); and

*Children and Young People (5-16 years)*³²

- Problems of teenage pregnancy are being addressed via the *Teenage Pregnancy and Parenthood Strategy and Action Plan* (Nov. 2002) with focus on areas of social deprivation;
- The Fit Futures Taskforce was set up in 2004 to tackle overweight and obesity in children and young people;
- The NI Tobacco and Action Plan identifies children and young people as a target group;
- A specific target has been set to have improved the mental health and wellbeing of young people aged between 16 and 24 by a fifth, between 2001 and 2025 as measured by the General Health Questionnaire (GHQ) 12 Score; and
- A target has been set to reduce disability and long-term health problems and increase life expectancy by promoting road safety.

5.1.2 OFMDFM – OUR CHILDREN AND YOUNG PEOPLE – A TEN YEAR STRATEGY FOR CHILDREN AND YOUNG PEOPLE IN NORTHERN IRELAND 2006-2016

The aim of the Strategy is to ensure that by 2016 all of Northern Ireland’s children are fulfilling their potential. The Strategy accepts that “*a healthy child is more likely to enjoy, to learn and to achieve. Likewise a child experiencing economic and environmental well-being is also more likely to be healthy*”³³.

Infant mortality has always been recognised as a good indicator of the health of the population and although between 1988 and 2003 the infant mortality rate in NI fell from 8.9 per 1000 live

³⁰ Lifetime Opportunities, OFMDFM, November 2006, pg 30

³¹ Mielck, A. et. al. Children, an important target group for the reduction of socioeconomic inequalities in health, Ch. 9 in Mackenbach, J. and Bakker, M., *Reducing Inequalities in Health – A European Perspective*, Routledge, London and New York (2002)

³² Ibid, pg 33-44

³³ OFMDFM – Our Children and Young People – A Ten Year Strategy for Children and Young People in Northern Ireland 2006-2016, pg 9

births to 5.3 per 1000 live births, the rate for the most deprived wards in NI was 23% higher than the NI average³⁴.

Dental decay is a significant public health problem in NI and children in the 20% most deprived wards in NI are almost twice as likely to have experienced dental decay as children from the most affluent wards³⁵.

The Strategy notes the need to adopt a 'whole-child' approach, which gives recognition to the complex nature of our children's and young people's lives and advocates making a gradual shift to preventative and early intervention approaches without compromising those children and young people who currently need services most.

A set of indicators have been developed to measure the success of the Strategy, some of which are internationally used and are similar to those described in Section 3.0 as used by UNICEF in measuring child well-being and some have a more specific NI focus. Baseline data is available for each of these and the following are those indicators that will measure progress in the areas of tackling child health issues and inequalities³⁶:

- Infant mortality rate;
- Low birth weight (less than 2500g);
- Immunisation uptake for MMR at 24 months;
- Level of decayed/missing/filled teeth in Primary 7 children;
- Level of decayed/missing/filled teeth in Primary 1 children;
- No. of child deaths due to accidents on farms and in the workplace;
- % of children with Type 1 diabetes;
- % of children with asthma;
- No. of young people waiting for a first CAMHS (Child and Adolescent Mental Health Service) outpatient appointment;
- Lengths of time young people are waiting for a first CAMHS outpatient appointment;
- Rate per 1,000 births to females under 17 years;
- Diagnostic rate of new sexually transmitted infections (under 16 years & 16-19 year olds);
- % of pupils in Years 8-12 who have ever drunk alcohol (as a proportion of all respondents);
- % of pupils in Years 8-12 who have ever been drunk (as a proportion of all respondents/as a proportion of those who have ever drunk alcohol);
- % of pupils in Years 8-12 who are current smokers;
- % of pupils in Years 8-12 taking illegal drugs in the past year;
- % of children consuming 5 portions of fruit and vegetables per day;
- % of children taking part in sports or other physical activities at least 3-5 times per week; and
- % of Primary 1 pupils who are obese.

5.2 REPUBLIC OF IRELAND

In 1997 a 10-year National Anti-Poverty Strategy was developed in the Republic of Ireland. This was subsequently replaced by 3-year National Action Plans (NAP) in line with EU requirements at the time. EU Member States are no longer required to prepare on a regular basis a National Action Plan against Poverty and Social Exclusion, however, the Republic of Ireland has committed itself to preparing a new National Action Plan for Social Inclusion which

³⁴ Ibid, pg 10

³⁵ Ibid, pg 12

³⁶ Ibid, pg 32-42

was published and launched by the Taoiseach, Tanaiste and Minister for Social Affairs on 21 February 2007.

Chapter 2 of the *National Action Plan for Social Inclusion 2007-2016*³⁷ focuses on children and the main points and goals relevant to this paper are briefly summarised here. In the Republic of Ireland households with children which are particularly at risk include: those headed by lone parents; people with disabilities; and those who are unemployed, although the number in this latter group has declined significantly. Data show that children aged up to 14 years experienced the highest levels of consistent poverty in 2004 and 2005, at 9.5% and 10.2% respectively.

Health inequalities in the Republic of Ireland manifest themselves in a higher incidence of low birth weight and premature mortality among children from lower socio-economic groups and through emerging issues such as exercise, nutrition and obesity. On the positive side, the majority of school-going children and young people now have a greater involvement in extra-curricular sports activities. Involvement in sports is more prevalent among second-level students than among primary students and male students in both primary and second-level schools are more likely to have higher levels of involvement than females.

Access to good quality healthcare is essential for the well-being and future development of children. However, the development of healthy behaviour and attitudes, particularly in relation to exercise, eating habits and avoidance of alcohol and other substance abuses is also crucial. The following targets have been identified in this area:

- The delivery, under the framework of the Vision for Change Strategy, of child and adolescent Community Mental Health Teams (CMHTs) in the order of 1 CMHT per 100,000 of the population by 2008 and 2 CMHTs per 100,000 of the population by 2013;
- The prevalence trends of smoking and substance use will be monitored through the National Health and Lifestyle Surveys and the European School Survey Project on Alcohol and other Drugs (ESPAD). ESPAD results will be available in late 2007 or early 2008;
- The Survey of Lifestyles, Attitudes and Nutrition (SLÁN 06) fieldwork will be completed and data analysed in 2007. The first results will be available by end 2007;
- The Health Behaviour in School-aged Children Survey (HBSC) results will be available from mid-2007;
- Substance use policies will be put in place in 100% of schools by 2008; and
- Access to treatment will be provided to 100% of problematic drugs users aged under-18 within one month after assessment.

A National Nutrition Policy to address children's food poverty and obesity will be finalised and launched by mid-2007. A national database will be developed to monitor trends of growth and overweight and obesity. The Programme of Action for Children (PAC) has developed a growth module for children and its implementation will be dealt with in the National Nutrition Policy. The 475 schools in the DEIS action plan not benefiting from the school meals programme will be targeted to increase participation and the current number of participating schools will be increased by 215, by the end of 2007. Additional funding of €3 million has been provided for this programme in 2007.

³⁷ www.socialinclusion.ie/NAP_inclusion_06.html

5.3 ENGLAND

5.3.1 POLICY

The following information is extracted and summarised from a King's Fund publication *Health Inequalities*³⁸.

When the Labour government came into office in 1997, a boy born in England into the poorest social group was likely to die nine years before a boy born in the richest social group and the data pointed to health inequalities between the north and south of the United Kingdom, and between different ethnic groups.

The Labour government has responded with a range of initiatives. In 1997, it commissioned former Chief Medical Officer, Sir Donald Acheson, to carry out an independent inquiry that found widespread evidence of health inequalities, and recommended action in the NHS, on poverty, housing, transport, education and employment. More recently, its 2004 White Paper, *Choosing Health: Making healthier choices easier*, placed a strong emphasis on the importance of personal choice and changing individual lifestyles and behaviour to ensure better population health, with a special focus on disadvantaged communities.

Income inequality in the UK rose by five per cent between 1996/97 and 2002/03, with the richest one per cent of the population holding a greater total annual income than the bottom 30 per cent. New Labour's strategy has been to focus on primarily targeted poverty-reduction programmes, rather than measures to tackle income inequality more widely. It has also pledged to end child poverty within 20 years, and set itself challenging targets for reducing the gap between the health of better-off and poorest groups in society.

With regards to child poverty and subsequent child health inequalities, Fiscal measures have included establishing tax credits, which in effect operate as more generous benefits for working families with children. In terms of income inequalities, in the five years from 1997, the numbers of people living in poverty in the UK dropped from 13.9 million to 12.4 million. Pensioners and children have benefited most. But this is balanced against the fact that almost four in ten people without children are now below the poverty line (that is, existing on less than half the national average income) – a slightly higher rate than in 1997.

Community-based interventions have included substantial investment in a range of programmes intended to improve health and well-being in disadvantaged communities through action on regeneration, employment, education, housing and crime. Between 1999 and 2004, for example, the government spent £1.3 billion on 500 Sure Start programmes, designed to improve the health and well-being of very young children and their families.

Twenty-six Health Action Zone programmes were established, with a budget of £449 million, to improve the health of some 13 million people in deprived areas. Healthy Living Centres, with a budget of £300 million, aim to tackle local inequalities and involve local communities in improving their own health. These programmes have not been fully evaluated as yet.

As regards child health inequalities, the Health Inequalities Unit is a team within the Department of Health with a cross government focus and its work is shaped by a Public Service Agreement (PSA) target set in 2001 when the government pledged to reduce inequalities in health outcomes by 10 per cent by 2010, as measured by infant mortality and life expectancy at birth. There are two more detailed objectives³⁹:

³⁸ www.kingsfund.org.uk/publications/briefings/health.html

³⁹ DoH website, Policy and Guidance, Health and Social Care Topics, Health Inequalities section
Providing research and information services to the Northern Ireland Assembly

- Starting with children under one year, by 2010 to reduce by at least per cent the gap in mortality between routine and manual groups and the population as a whole; and
- Starting with local authorities, by 2010 to reduce by at least 10 per cent the gap in life expectancy between the fifth of areas with the worst health and deprivation indicators and the population as a whole.

Average life expectancy in the UK has improved, but the gap between average life expectancy in England and that in the lowest fifth of local authorities increased between 1997 and 2003 by two per cent for males and five per cent for females. The infant mortality rate for the population as a whole also fell between 1997 and 2003, but the latest data for 2001/03 shows that the gap between the most and the least well-off groups has widened.

The challenges that still exist include:

- By 2010, the government wants to reduce the conception rates among teenagers (women aged under 18) by half. Between 1998 and 2003, under-18 conceptions fell by 10 per cent and under-16 conceptions by 12 per cent. Most teenage births are in the manual classes, and the rate is still higher than elsewhere in Western Europe;
- It also wants to reduce obesity rates among children. But between 1995 and 2002, boys and girls classed as overweight or obese increased by 27 per cent and 21 per cent respectively, with more obese or overweight children among manual classes;
- The government plans to reduce smoking prevalence in routine and manual socio-economic groups from 31 per cent in 2002, to 26 per cent or less by 2010. People in these groups are nearly twice as likely to smoke as people in managerial and professional classes, and this accounts for a great deal of the difference in life expectancy between social groups with a subsequent impact on the health of children in these households.

5.3.2 PROGRESS

The Department of Health's *Status Report on the Programme for Action on Health Inequalities* summarises the progress on National Indicators for England. Those with an impact on child health inequalities are included below:

Teenage pregnancy – there has been a 9.8% drop in the rate of under-18 conceptions between 1998 and 2003; however, findings from a national evaluation of the teenage pregnancy strategy indicate that over a longer period (between 1994–98 and 1999–2002) teenage conception rates in the most deprived top tier of local authorities fell faster than in other areas.

Road accident casualties – there has been a significant reduction in the rate of road accident casualties for children since 1998, but no significant narrowing of the gap in such casualties.

Smoking – there has been a reduction in smoking prevalence among all adults since 1998 (including a slight reduction in manual groups), but no significant narrowing of the gap in smoking prevalence between manual groups and other groups; there is a strong social gradient in smoking prevalence among pregnant women.

Fruit and vegetable consumption – since 2001 there has been no improvement in fruit and vegetable consumption for the most disadvantaged groups and no significant narrowing of the gap.

Housing – there has been a significant reduction in the proportion of households living in non-decent housing since 1996, with a significant narrowing of the gap between vulnerable households and all households overall in absolute terms.

PE and school sport – nearly two-thirds of pupils in school sport partnerships spend at least two hours a week on high-quality PE and school sport but with lower participation rates in schools with a high proportion of FSM pupils.

Poor children – there has been a significant reduction in the proportion of children living in low-income households since 1998/99 on all measures.

Homeless families – since March 2002 there has been a significant reduction in the number of homeless families in bed and breakfast accommodation; there has been a significant increase in the number of families living in temporary accommodation overall, although this number has remained fairly constant since September 2004.

5.4 WALES

The following information is extracted from *A Fair Future for our Children, The Strategy of the Welsh Assembly Government for Tackling Child Poverty* (2005).

The Welsh Assembly government believes that tackling child poverty ultimately benefits the whole community leading to healthier, higher skilled adults and lower crime rates. The aim is to tackle poverty through mainstream services, backing this up with specific targeted support when needed. Overall the plan aims to:

- Fulfil children and young people's hopes and ambitions;
- Raise their standard of living and quality of life;
- Ease their worries about lack of money;
- Help them to share in making decisions and providing services;
- Combat discrimination that stops children achieving their potential;
- *Improve health and well-being and reduce inequality*; and
- Help children to become independent citizens who can make choices.

The plan aims to tackle the following three areas of child poverty, income poverty, participation poverty and service poverty. It is under the heading of service poverty that actions concerning health inequalities are described. The main measures to tackle child health inequalities under the umbrella of service poverty are summarised from the plan below⁴⁰.

Early years

The Assembly Government has announced £50 million of additional funding for Early Years investment over the two years 2006-7 and 2007-8. This will provide for such activities as Sure Start projects working with families, additional money for the Foundation Phase, good quality childcare (The Assembly Government has established a Childcare Working Group to provide advice on implementing the Childcare Action Plan for Wales), and language and play programmes. The investment will be targeted at the most deprived communities in Wales, recognising the evidence that children within areas of multiple deprivation suffer additional effects of disadvantage.

Integrated centres and integrated services

A programme of integrated centres provides children and families with buildings and service networks bringing together in every case early years education, play, childcare and community training. Integrated centres may also deliver a range of family support services. Working with the Big Lottery Fund there are plans to develop at least one integrated centre in each local authority area.

Family Support

⁴⁰ A Fair Future for our Children, pages 37- 42

Supporting disadvantaged families will also be a theme in the Assembly Government's Parenting Action Plan, which is currently being developed. The Plan will consider a range of policy areas and service provision, including early years support, NHS and health promotion programmes, education and citizenship, and community safety.

It is known that some children underachieve at school because developmental delay has not been identified in the early years as some children are not receiving the universal core child health surveillance programme that all children in Wales should have access to. The National Service Framework for Children, Young People and Maternity Services contains a key action to ensure that all children are enabled to access core child health surveillance programmes.

Child and adolescent mental health services (CAMHS)

The vision for CAMHS is set out in the All-Wales Strategy for Child and Adolescent Mental Health Services. 'Everybody's Business', (2001) as a ten year programme. 'Everybody's Business' has at its core the following overriding aims:

- Relief from current suffering and problems with the intention of improving, as soon as possible, the mental health of children, adolescents and their families; and
- Longer-term interventions to improve the mental health of young people as they grow up and when they become adults and thereby, to positively influence the mental health of future generations.

The National Service Framework contains a number of key actions in relation to the promotion of emotional well being in children and young people, as well as key actions in relation to the early and effective intervention for children and young people who have mental health problems or disorders.

Communities First

Communities First, the Welsh Assembly Government's programme for tackling poverty and social disadvantage in the most deprived communities across Wales, has a particular interest in ensuring positive outcomes for children and young people. Giving children and young people the best possible start and the opportunity to influence the services that effect them have been identified as key themes within the programme.

The needs of young people will be considered through the Communities First Action Plans that are to be developed by Partnerships. These should provide comprehensive health advice and support for young people in a way that is acceptable to them and communities should have a forum in which the views of all people, including the young, are listened to and acted upon.

5.5 SCOTLAND

5.5.1 IMPROVING HEALTH IN SCOTLAND

Improving Health in Scotland: The Challenge was published by the Scottish Executive in 2003 and provided a framework for improving health for the whole population and tackling health inequalities. It was proposed that improved health would require all the different policy strands, and the different action programmes for improving health, lifestyles and life circumstances to be linked and, where possible, integrated and that improved health also required linkages with different elements of health service provision, local authority provision and the different policy arenas of education, social justice, environment, employment and sport. In addition, the programmes must also try to close the gap between the least and most affluent communities.

The Scottish Executive proposed a life course approach, as advocated by WHO (see section 3.0), by supporting people at critical times in their lives and working to ensure groups of people

believe that health improvement is within everyone's grasp, To support this new focus and enable closer linkages and partnership working for health improvement, four major themes were proposed:

- Early Years;
- The teenage transition;
- The workplace; and
- Community-led.

As relevant to this paper the action proposed for *early years* and *the teenage transition* is included below as extracted from the Framework:

Early Years

There is clear evidence that health throughout life is powerfully influenced by experiences from the time of conception and in early childhood. Health, local authority and voluntary sector services need to join up to provide seamless and responsive support to families to ensure the best possible start in life.

An integrated strategy for Early Years will include an enhanced focus on the following health improvement actions:

- Developing confident, competent, well informed and supported parents who feel secure in their role;
- Well-nourished, well-balanced and healthy children, who are well prepared to benefit from education;
- Pregnant women – reducing exposure to tobacco, alcohol and other drugs;
- Increasing the proportion of mothers breastfeeding, focusing on disadvantaged groups;
- Improving a childhood diet and oral health;
- Improving family circumstances, coping abilities and family mental health;
- Encouraging higher levels of physical activity;
- Reducing accidents inside and outwith the home; and
- Promoting resilience in children and young people.

The integrated Early Years strategy will cover areas such as: support for healthy pregnancies through primary care, family planning and maternity services; childcare provision, health visiting support for infancy and pre-school children; better integrated working between health and local authority family support services in the Early Years; and support for parenting.

The Teenage Transition

The intention is to create a set of circumstances where young people feel supported to the extent that they fulfil their potential, maintain self-esteem and avoid a wide range of health-damaging behaviours and other hazards. This approach will incorporate specific strands dealing with issues like smoking, drugs, sexual health, alcohol, mental health and well-being, diet and physical activity.

Schools, in partnership with the home and community, can make a difference to the health behaviours of young people. The Scottish Health Promoting Schools Unit has been set up as a partnership initiative involving HEBS, LTScotland, COSLA and the Scottish Executive. The Unit will have a national leadership role championing, facilitating and supporting the implementation of the health promoting school concept throughout Scotland. Within health promoting schools, not only is health education integral to the curriculum but the school ethos, policies, services, extra-curricular activities and partnerships foster mental, physical and social wellbeing and healthy development. The concept is central to the New Community Schools initiative. New Community Schools have the twin aims of raising attainment and improving social inclusion.

The aim is to ensure that each young person develops personal skills, emotional intelligence and a high level of educational attainment. At the same time they need to be given the skills and the support to negotiate issues like sexuality and coping with potentially addictive substances, and are to be encouraged towards a lifestyle that optimises their physical and mental wellbeing. This programme proposes:

- Encouragement and enabling of young people to undertake regular physical activity and to eat a healthy diet;
- Promotion of resilience and good mental health in children and young people;
- Reduction in the levels of regretted first sexual experience, abusive relationships, sexually transmitted disease, teenage pregnancy and early parenting; and
- Reduction in young people's use of tobacco, alcohol and drugs.

This approach will be taken forward through:

- The roll-out of the New Community School and Health Promoting School programme to all schools by 2007;
- Redesign of school nursing to young people in New Community Schools but also for children with special educational needs and vulnerable children; and
- A national strategy for sexual health to include application of emerging lessons learned from Healthy Respect in sexual health and wider aspects of young people's general health.

5.5.2 MINISTERIAL TASK FORCE ON HEALTH INEQUALITIES

A Scottish Ministerial Task Force on Health Inequalities has been formed after its inclusion in the Healthier Scotland Cabinet Paper in June 2007 and after being announced to Parliament on 29 June 2007. The intention of the Task Force is to agree priorities for cross-cutting government activity that will achieve measurable outcomes in reducing health inequalities⁴¹.

6. EUROPE-WIDE STRATEGIES/GOOD PRACTICE FOR ACTION TO TACKLE CHILD HEALTH INEQUALITIES

A pattern that is common to all EU Member States is that poor health is not only confined to those at the bottom of the social hierarchy, in fact there is a social gradient of mortality and morbidity that affects all members of society. The further down the social ladder a person is, the worse their health. There are therefore systematic differences in the health of groups and communities that occupy unequal positions in society.

6.1 EU PROJECT – CLOSING THE GAP

Closing the Gap is a three year (2004-2007) initiative based on a partnership of 21 national public health agencies and institutes from across Europe that are working together to develop a shared understanding of health inequalities and to determine how to reduce them. A task of the initiative has been to highlight the role that the EU can play in reducing health inequalities at the national or local level. It is however, at local level where measures to address health inequalities take direct effect. On the *Closing the Gap* website a full European Directory of Good Practices⁴² to reduce health inequalities can be found and comprehensively searched by target population, target age etc. These exemplar practices have been collected based on a

⁴¹ www.scotland.gov.uk/Topics/Health/inequalitiestaskforce

⁴² www.health-inequalities.eu

set of quality elements, developed and discussed for the area of tackling health inequalities and all exhibit specific selection criteria.

The following list, with a brief outline of each, are samples of those in the directory that specifically target general and socioeconomic related health inequalities in children.

Springboard Family Support (Ireland)

This is an initiative of family support projects targeting vulnerable families which aims to improve the wellbeing of children and parents e.g. individual counselling work; group activities such as breakfast clubs, coffee mornings, homework clubs; family counselling/therapy; and drop-in facilities.

Manchester Family Link Worker Scheme (England)

The family link workers work in partnership with other agencies including schools, nurseries, social workers, health visitors etc. and it demonstrates how multi-agency working can tackle health inequalities and support families with young children and a variety of needs.

Project Jiwsu (Wales)

A project delivering sex and relationship education programmes to groups of vulnerable young people (aged between 11 and 25) in community settings throughout North Wales.

Poverty and Health of Children (Netherlands)

The main aim is to tackle health inequalities with respect to children by influencing the state of poverty. Parents and children are asked during a preventative medical about the relation between the lack of money and items which influence their health e.g. because of lack of money the child cannot attend a sports club. A team from the municipal health service tries to help the family in several ways e.g. a small amount of money for swimming lessons.

Equal Health, Equal Opportunities (Netherlands)

A health promotion community project in a deprived neighbourhood in Tillburg, The Netherlands. It includes activities such as district health day, walking club, children's cooking café, breakfast meetings, lunch topic meetings and exercise week.

Supervision by the Youth Practitioner of Pupils with Absence because of Illness (Netherlands)

Pupils not attending school because of illness (based on certain non-attendance criteria) are reported to the youth physician, who meets with parents and pupils, gives advice, liaises with the school and social services etc.

The Pine House (Norway)

Set in an area of Oslo with high immigrant population - prenatal maternity care, community care for children aged 0-6 years and an open kindergarten where children and adults can meet other people. Activities are based on the wishes of the community it serves.

Smoke-free Children (Sweden)

Since 1997 child health nurses in Sweden have used a new non-judgemental method for discussing smoking with parents. The method focuses on the child's environment and not the parent's smoking per se. The parents are requested to smoke without exposing their infants to smoke. Although not primarily targeted, parent's smoking has decreased faster than the general population of the same age group.

Reduction of Social Inequalities in Child Accidental Injuries through Environmental Measures (Sweden)

The introduction of environmental measures to improve child safety e.g. new building laws passed to have certain safety features in new homes. The preventative efforts were initiated by the Swedish Red Cross and Swedish 'Save the Children'.

I go to the U And You? (Germany)

This relates to the early detection measures U1-U9 of the legal health insurance in Germany. They serve to evaluate physical and psychological development. This intervention is to increase participation in these measures in the 3-5 year old age group, especially in low social or migrant groups and involves a Kindergarten group contest with posters and fliers. Children attending for their evaluations receive incentives of t-shirts and photos of their kindergarten wearing their t-shirts are entered into group competitions.

Guardian Angel (Germany)

A model project offering support for families with small children in a disadvantaged neighbourhood of Flensburg (Northern Germany), by a family midwife, social worker and parent's café. Guardian Angel aims to intervene with help in problems as early as possible. The area of the city has a high proportion of young and single parent families living on state benefits.

Healthy Parenthood (Czech Republic)

Educational activities focused on the improvement of responsible sexual behaviour in young people (including Romany, an ethnic minority). The two main intervention activities are education and health care services.

6.2 OTHER EVALUATED INITIATIVES

The table below outlines a sample of somewhat older effective interventions extracted from tables 9.2 and 9.3 of the following book,

Mielck, A. et. al. Children, an important target group for the reduction of socioeconomic inequalities in health, Ch. 9 in Mackenbach, J. and Bakker, M., *Reducing Inequalities in Health – A European Perspective*, Routledge, London and New York (2002).

The interventions included in the table have been evaluated by one of the following research designs:

- Randomised controlled trial (RCT);
- Controlled experiment (experiment with control group);
- Observational study with control group; or
- Experiment or time series without control group.

They are fully referenced in the footnotes for further reading. Most of the reported effective interventions presented here have been conducted in the UK, the health problems most often targeted are mental health and accidents and are often delivered by professional staff working in the settings in which children live and their schools. The interventions were those aimed specifically at either low socioeconomic groups or the general population with the intention of reaching low socioeconomic groups and were either directed specifically or indirectly, via families, to children and adolescents.

Objective of Intervention	Country/date published	Intervention	Effect of Intervention
Nutrition/Breast feeding	UK (1992) ⁴³	Food diary of children's diet filled out by mother, home visits to discuss diet	Improved diet
	UK (1986) ⁴⁴	Provision of lactation nurse	Increased breastfeeding
	UK (1989) ⁴⁵	Dietary education, and screening for iron deficiency	Screening was acceptable and successful
General Health	UK(1986) ⁴⁶	Reorganisation of child clinic with more intensive medical care and personal attention	Increased no. of clinical visits and increased detection and treatment of defects.
Accidental Injuries	UK (1993) ⁴⁷ , Sweden (1995) ⁴⁸	Community interventions and feedback of local to local authorities in charge of local environment	Reduction of accidental injuries
	UK (1994) ⁴⁹	Wearing of bicycle helmets	70% reduction of head injuries
	UK (1995) ⁵⁰	Building of separate bicycle lanes	20% reduction of accidental injuries
	UK (1998) ⁵¹	GP advice about child safety and the provision of low-cost safety equipment	Increased use of socket covers, locks on cupboards, safer medicine storage etc.
	Norway (1998) ⁵²	Information to authorities and parents about passive and active burn injuries prevention measures	50 % reduction in burn injuries
Mental Health Problems	Sweden (1992) ⁵³	Training in active problem solving	Increased self-initiated health-enhancing activities
	Sweden (2000) ⁵⁴	Child-centred quality daycare	Reduction of behavioural and social problems

⁴³ Brown, J.J. et. al. (1992), *Health Trends* **24**(4), 161-164

⁴⁴ Jones, D.A. and West R.R. (1986), *J. Epidemiol Commun Health*, **40**(1), 45-49

⁴⁵ James J. et. al. (1989), *Br Med J*, **299**(6703), 838-840

⁴⁶ Nicholl A. et. al. (1986), *Lancet*, **1**, 606-608

⁴⁷ Roberts H. et. al. (1993), *Sociol. Health Illness*, **15**, 447-463

⁴⁸ Svanstrom,L. et. al. (1995) *Injury Prev*, **1**(3), 169-172

⁴⁹ Maimaris, C et. al. (1994), *Br Med J*, **308**(6943), 1537-1540

⁵⁰ Sabey B, (1995), *Injury Prev*, **1**(3), 182-186

Objective of Intervention	Country/date published	Intervention	Effect of Intervention
Mental Health Problems (cont.)	Norway (1994) ⁵⁵	Multilevel school programmes aimed at teachers, students and parents	50% reduction in bullying
	The Netherlands and other countries (1995) ⁵⁶	Metastudy: 12 studies of training programmes	Increased maternal sensitivity to infant and increased secure mother-infant attachment
Dental Health	UK (1989) ⁵⁷	Fluoridation of drinking water in different communities	Fluoridation reduces but does not eliminate social inequalities
Tobacco Smoking	Norway (1997) ⁵⁸	Provocative media campaign	Reduced smoking
	UK (2000) ⁵⁹	School education combined with community interventions	Reduced smoking
Infections	UK (1994) ⁶⁰	Information of non-immunised children to GPs & health visitors, clear advice on immunisation	Improved uptake of immunisation is all socioeconomic groups, inequalities only diminished at 95% overall uptake
Sudden Infant Death Syndrome (SIDS)	UK (1994) ⁶¹	Advice on supine sleeping	Metastudy: decrease of SIDS

⁵¹ Clamp M. and Kendrick D. (1998), *Br Med J*, 316, 1576-1579

⁵² Ytterstad, B. et. al. (1998), *Injury Prev*, 4(3), 176-180

⁵³ Arborelius, E and Bremberg, S. (1992), *Health Promotion in Action*, ESSOP Congress, Valencia, Spain, 1992: 69

⁵⁴ Zortich, B. et. al. (2000), Day Care for pre-school children (Cochrane Review) *The Cochrane Library*, 2000, (3)

⁵⁵ Olweus, D. (1994), *J Child Psychol Psychiatry*, 35(7), 1171-1190

⁵⁶ Ijzendoorn van MH et. al. (1995), *J Child Psychol Psychiatry*, 36(2), 225-248

⁵⁷ Carmichael, CL et. al. (1989), *Br Dent J*, 167, 57-61

⁵⁸ Hafstad, A. (1997) Provocative anti-smoking appeals in mass-media campaigns, Thesis, University of Oslo, Oslo

⁵⁹ Sowden, A and Arblaster L. (2000) Community Interventions for preventing smoking in young people (Cochrane Review), *The Cochrane Library*, 2000, (1)

⁶⁰ Reading R. et. al. (1994), *Br Med J*, 308(6937), 1142-1144

⁶¹ Gilbert R. (1994), *Arch Dis Child*, 70(54), 445-449