

# DETERMINANTS OF HEALTH

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# Introduction

- Promoting public health in the 21st century is a multidisciplinary endeavour ranging from the surveillance of health and disease in populations, through to the provision of health advice and information.
- It occurs at all levels, from the actions taken by individuals through to those taken by national and international agencies. It also takes place in many different settings: for example, in homes, workplaces, schools, hospitals, youth centres, nightclubs, and on the street.
- In this course we look at how wider social determinants, work together to influence our health for good or ill.

# The main determinants of health (Dahlgren and Whitehead, 1991)



# Dahlgren and Whitehead

- This multifactoral approach differentiates between individual and social factors, offering a diagram with layers which can be peeled away
- The core of the diagram consists of inherited attributes relating to age, sex and hereditary factors.
- The inner layer suggests that health is partly determined by individual lifestyle factors, such as patterns of smoking, physical activity and diet.
- Moving outwards, the diagram draws attention to relationships with family, friends and significant others within the local community. These are the downstream determinants of health – the actions of individuals and communities

- The next layer focuses on working and living conditions – housing, employment, access to healthcare services and so on
- The outer layer highlights broader socio-economic, cultural and environmental forces such as economic development, shifts in welfare systems, political change, social forces and structures.
- These final two layers relate to the upstream determinants of health. Although it is not really shown in the diagram, there is potential for layer-to-layer interaction. For example, cutbacks in welfare services might adversely affect people's access to adequate housing and thus influence their health.

# 1. Age, sex and hereditary factors

- The significance of human biology and genetics for health has been recognised. Indeed, probably one of the most important endeavours undertaken in recent years has been the Human Genome Project (HGP), an internationally co-ordinated and funded undertaking which aims to map every gene in human DNA.
- the ability to identify gene mutations is making possible each of the following:
  1. screening for carriers of recessively inherited disorders (e.g. cystic fibrosis)
  2. identification of those who have the gene for a particular disorder e.g. Huntington's Disease, sickle cell)
  3. gene therapy for those affected with a disorder (e.g. cystic fibrosis).

# Research and practice opportunities for public health genetics

## Public understanding of genetics

- Methods to increase genetic literacy
- Genetic risk communication
- Informed consent and decision making
- Unintended outcomes of genetic information (e.g., fatalism, fear of discrimination)
- Media reporting of genetics

## **Interventions for health behavior change**

- Impact of genetic information on screening and lifestyle behaviors
- Methods to incorporate genetic information into behavioural interventions
- Role of family history as a tool for public health prevention

## **Public health assurance and advocacy**

- Advocacy against premature introduction of genetic services
- Methods to counter direct-to-consumer and direct-to-provider advertising
- Availability of comprehensive genetic services
- Equal access to genetic services



# Sex, gender and health

- It has long been assumed that sex (the **biological** differences between men and women), rather than gender (the **socially** defined differences between men and women), determines health.
- For example, in most countries, male life expectancy is lower than that of females and this is projected to continue

**Age and the lifecourse: healthy ageing** Lifecourse perspectives draw on age, sex and hereditary factors to show how health effects accumulate throughout a person's life. Illness and ageing are seen to go hand-in-hand and old age is often portrayed as a period of decrepitude and decline

# 3 Individual lifestyle factors

- In recent years the concept of a ‘healthy lifestyle’ has achieved considerable popular currency but, like many such concepts, the term can be widely used in many different contexts and can come to mean different things.
- Davison et al. provide a useful definition of ‘lifestyle’ which they describe as: ‘the aspects of health related behaviours and conditions which entail an element of personal action at the individual level ... strongly associated with the possibility of individual choice and the triumph of self control over self indulgence’

- The main issues addressed usually include diet and physical activity, tobacco and alcohol use, drug intake and sexual activity, although, at various times, other issues have also fallen within this rubric, for example, exposure to the sun and use of seat belt or child car seat.
- Many theories and models have been developed to help explain individual health behaviours. However, one of the key problems facing those promoting public health is the failure of many individuals to follow healthy lifestyle advice.

- Two key explanations have been put forward to explain this. The first rests on the notion that the public are ‘victims of their own ignorance’ and that with increased health education and advice, they will begin to embrace healthier lifestyles.
- The second explanation draws on the idea that individuals can believe that health is largely determined by external factors, therefore denying the relevance of individual behavioural change.

# 4 Social and community influences

- Here the role of social and community influences on health are considered. The concept of social capital has become very popular within public health in recent years, although, like many similar concepts, it been used in different ways by different people.
- **Social capital definition;** ‘the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition – or in other words to membership of a group

- A study of physical activity and the social environment (i.e. culture, people and institutions with whom people interact) involving over 3,300 adults in six countries (Ståhl et al., 2001) also found that the social environment was the strongest predictor of physical activity.
- Those who perceived low levels of social support from their personal environment (i.e. family, friends, school and workplace) were twice as likely to be physically inactive compared to those who reported high levels of support
- The study concluded that strategies to promote greater physical activity would need to focus more on social norms regarding active lifestyles, and on making activity more ‘socially acceptable’.

- The Social Exclusion Unit (SEU) defines social exclusion as happening: when people or places suffer from a series of problems such as unemployment, discrimination, poor skills, low incomes, poor housing, high crime, ill health and family breakdown. When such problems combine they can create a vicious cycle.
- Social exclusion can happen as a result of problems that face one person in their life. But it can also start from birth. Being born into poverty or to parents with low skills still has a major influence on future life chances.

- Key groups who may suffer social exclusion include people with mental health problems, young runaways, teenage mothers and ex-prisoners, all of whom may lack membership of the networks and social structures that promote positive health and wellbeing. One of the goals of the public health office is the reintegration of people who, for one reason or another, have ‘fallen through the net’.
- Psycho-social approaches emphasise the importance of relational networks in promoting good health. For example, religiosity, or spirituality, has been found to increase a sense of belonging and, through various related activities, such as volunteering, promote good health



# 5 Living and working conditions

- Psycho-social explanations emphasise the way in which hard-to-manage stress, such as bringing up children alone and in poverty, can lead to health damaging behaviours.
- Other living conditions can also cause stress for people who are excluded or at risk of social exclusion , such as slum dwellers, homeless persons
- People living in poverty and social exclusion often have the greatest need for good healthcare, education, jobs, housing and transport

# General social and environmental conditions

- Neo-materialist explanations focus on the way in which adverse socioeconomic and psycho-social environments, and the health-damaging mechanisms associated with them, are socially constructed.
- ‘we need to be mindful of the potential health impact of the entire array of social, political and economic policy we humans develop, such as social security, child welfare, education, or the location of potentially polluting industries’.
- Environmental degradation, coupled with shifting balances between production and consumption, can also have a considerable impact on physical health

- The issue of sustainability is also important here in that the unsustainable use of natural resources is a fundamental threat to human health.
- Lack of children's play facilities and open spaces, coupled with concerns with neighbourhood safety, also mean that children are less likely to engage in physical activity and more likely to participate in sedentary hobbies such as watching television or electronic gaming.

# Summary

Social determinants of health are;

1. age, sex and genetics
2. Individual lifestyle factors
3. Social and community networks
4. Work and living conditions
5. General economic, socio-cultural and environmental conditions