People in disadvantaged circumstances have poorer health at most ages, though the reasons are debated. In the eighteenth and nineteenth centuries, the links between low living standards and health problems were easy to see – poor housing and sanitation, malnourishment and hazardous jobs led to infectious diseases, health problems and injuries. Even with today’s improved living standards, a graded association remains: increased income equates to better health. This project reviews theories from 272 wide-ranging papers on how income affects health.

Key points

- Most papers examined the complex interactions between people’s income and their health throughout their lives.
- The study identifies four broad ‘pathways’ – routes through which income influences health:
  - material: money buys goods and services that improve health; the more money families have, the more/better goods they can buy;
  - psychosocial: managing on low income is stressful; comparing oneself to others and feeling at the bottom of the social ladder can be distressing. Such stress can lead to biochemical changes in the body, damaging its systems and eventually causing ill health;
  - behavioural: for various reasons, people on low incomes are more likely to adopt unhealthy behaviours (smoking and drinking, for example) while those on higher incomes are more able to afford healthier lifestyles;
  - reverse causation (poor health leads to low income): health may affect income by preventing people from taking paid employment. More indirectly, childhood health may affect educational outcomes, in turn affecting employment opportunities and earnings potential.
- These pathways are all likely to be important and interact across people’s lives in a complex web of links between income and health.
- The broader context is also important. Living on a low income in a country with a well-developed welfare state is unlikely to have the same health-damaging effects as living in one with poorer provision for healthcare and education.
- Given this complexity of interconnection between people’s income and health, a broad approach to improving the health of those with limited resources is important.

The research
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BACKGROUND

A wide range of research shows evidence of an association between income and health, at particular points in, and over, time. Hence improving the family income of disadvantaged groups in society has often been proposed as a key way to reduce health inequalities. However, despite so much evidence of the association between income and health, the specific ways in which people’s income might affect their health are less clearly understood. It is important to understand this, in order to know if increasing people’s income is likely to improve their health, or if other methods might be more successful.

This study reviews research on how money affects people’s health, examining more than 270 papers to extract theories concerning the links between income and health. The study then devises a framework to illustrate the socio-economic factors that generate people’s living standards at different stages of their lives, the complex relationships between these factors and the pathways that link income with health. The times and places in which these links operate also influence people’s broad economic, social, physical and cultural environments. In turn, these influence the relative importance of different pathways or how they operate at different stages of life.

The study identifies four broad pathways creating complex links between income and health. The basic theories for each are outlined below.

**Material pathways**

Money buys people the necessities they need for health, such as shelter, warmth and food, and allows them to participate in social activities such as leisure pursuits or holidays. It also allows people to avoid or ameliorate potentially harmful scenarios, such as living in poor-quality neighbourhoods that are noisy or polluted. This implies that a basic level of financial resources is required for good health. However, the notion of what is ‘basic’ evolves as societies change over time. Equally importantly, the evidence suggests a graded association: the more money people have, the better their health, because money allows them to purchase more and/or better quality goods and services.

There are also longer-term material associations over people’s lifetimes. In particular, parents’ financial resources – which might allow them to support or enhance their children’s schooling by purchasing books and computers for the home, or to pay for private education or move to more expensive areas with high-quality schools – may lead to better educational outcomes for their children. This is likely to result in better employment opportunities and earning potential for their children as adults. All these factors are associated with better health outcomes.

The broader context in which people live also impacts on the extent to which income levels influence health. For example, in societies with well-developed welfare systems, the health-damaging effects of sudden income losses resulting from unemployment or family breakdown are reduced by the availability of welfare benefits. Societies also provide many key services such as education and healthcare, but these may vary in degree and quality, which might have implications for people’s health and health inequalities.

**Psychosocial pathways**

Psychosocial effects result from the ways in which people’s social environment makes them feel. Two broad routes have been hypothesised between people’s financial situation and their health. First, living on low income is likely to be stressful, while people in disadvantaged circumstances may have less support from family and friends to draw on to help them cope. Secondly, feelings of lower status than others in society, because of less money, may make people feel distressed. Increasingly, biological research has provided evidence showing how such feelings can get ‘under the skin’ to cause biochemical changes in the body. When experienced repeatedly, these can damage physiological systems and lead to poor health.
**Behavioural pathways**

Many negative behaviours regarding health are more prevalent among socially disadvantaged groups. Various reasons have been proposed to explain this. First, some health-promoting behaviours are expensive. For example, a healthy diet is more expensive than an unhealthy one, and joining a gym or taking part in extracurricular school sporting clubs can be costly. Secondly, people may ‘self-medicate’ through unhealthy actions such as smoking or drinking alcohol, as a way of coping with difficult situations. A linked argument is that the struggle of coping with life on a low income can mean that people discount what might happen in the future more heavily. They are therefore less concerned about the possible impact of their current unhealthy behaviour on their future health.

A broader argument concerns the varying cultural contexts of people with different income levels. For example, the degree to which unhealthy behaviours are socially acceptable or the extent to which health-promoting messages to change behaviours may be taken up systematically varies among different social groups. Understanding this broader context, together with the various factors that lead people on low incomes to engage in unhealthy behaviours, helps to explain why increased income without broader changes – as shown, for example, in studies of lottery winners – does not lead to improved health behaviours.

**Reverse causation – poor health leading to low income**

People’s health also influences their income. Most directly, ill health can prevent people from working, which reduces their income. Taking a longer perspective over someone’s lifetime, ill health in childhood may influence their educational outcomes, which in turn affects employment opportunities and earning potential later in life.

**Other mechanisms**

Other factors also influence how people’s financial resources link to their health. Some research has argued that the association between income or money and health is actually caused by a third element affecting both of them. Two key candidates here are intelligence and personality. For example, intelligence may lead to educational advantage and socio-economic success as well as more health-promoting behaviour, hence good health.

**Conclusion**

A wide range of pathways link people’s income with their health. No specific mechanism dominates. They all interlink to form a complex network that interacts across people’s lives in ways that influence their health. The theories put forward in research into this topic therefore tend to suggest a need for wide-ranging policies to address health inequalities. However, the theories do emphasise the importance of parental income for children’s health, because of the long-term consequences in terms of their future social and economic circumstances as adults, and their resulting health.
About the project

This project systematically searched the literature on how income affects people’s health. Using bibliographic databases from a wide range of medical and social science disciplines, the study identified highly cited relevant papers (to identify the most influential ones) and very recent literature (to ensure that new theories were not missed) which included terms for ‘money’ and ‘health’. From these sources, the study examined 5,795 potentially relevant papers. Using highly structured processes, these papers were scanned for useful theories. Information from 272 papers was then extracted and summarised to derive the study’s findings. The team consisted of Michaela Benzeval, (University of Essex), Mhairi Campbell and Frank Popham (University of Glasgow), Theo Lorenc (University College London), Matt Egan and Mark Petticrew (London School of Hygiene and Tropical Medicine) and Lyndal Bond (Centre of Excellence in Intervention and Prevention Science).