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Climate change and rising energy costs: A threat but also an opportunity for a healthier future?

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Summary Health problems caused by overconsumption, growing inequalities and diminished well-being are issues that have been attributed to the prioritization of economic growth as the central purpose of society. It is also known that climate change and rising energy prices will inevitably bring changes to the globe's economic models. Doctors and the wider public health community have campaigned successfully in the past on issues such as the threat of nuclear war. Is it now time for this constituency to make its distinctive contribution to these new threats to health?

Economic growth as a historical driver of health improvement

In the early stages of industrialization, economic growth and health have grown in parallel. Greater wealth leads to better health, but improved health also contributes to economic growth.¹ Various mechanisms have been proposed for this association, including better nutrition as a result of the agricultural revolution,² improved sanitation and public infrastructure,³ and the creation of

welfare systems and local government.⁴ This historical association is strengthened by evidence from occasions where economic growth has faltered (1970s de-industrialization in parts of Europe⁵ and the economic collapse of the former Soviet Union in the late 1980s⁶), which shows that economic collapse can have a marked impact on health.

This paper argues that the association between increasing wealth and health remains partially true for poorer countries, but that further growth will not yield health gains for industrialized economies such as the UK. Therefore, a fundamental re-examination of the contribution of economic growth to health is urgently required.

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What is driving current concerns about economic growth?

There is concern about economic growth for two reasons. First, economic growth associated with rising consumerism, individualism and economism damages our sense of well-being and the cohesion of our society.^{7,8} Second, economic growth is not sustainable in a finite planet that is showing the detrimental impact of exponential growth in the consumption of energy and resources.⁹ The question is, are these concerns justified, and what is the most appropriate response?

Ideally, a public health response should be based on strong evidence;¹⁰ however, the dilemma of the sigmoid curve proposed by Handy¹¹ suggests that waiting for the accumulation of evidence before taking action may be too late (Position B on Fig. 1), as decline is already established and a change in direction becomes increasingly difficult. The best time for action is Position A, where resources are still growing and are available to grow a new and sustainable curve.

The incomplete evidence base which suggests that we are at Position A and should take action now is framed in four areas: well-being; overconsumption; inequalities; and, most importantly, sustainability.

Well-being

Since the mid-1970s, increased economic growth in the USA, Europe and Australasia has not been accompanied by commensurate improvement in well-being.^{12,13} Despite the difficulties in defining, measuring and providing its historical trends, it has become clear that well-being has not improved substantially in the developed world for at least 25 years, and may even be declining.

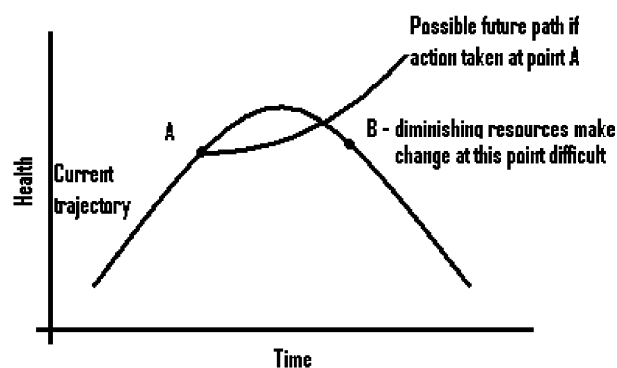


Figure 1 The dilemma of sigmoid curves in the response of health to economic growth.¹¹

Table 1 Hypotheses linking economic growth to unhappiness

Creation of a 'hedonic treadmill'
Choice anxiety
Loss of deeper meaning and purpose to life
Loss of hope with satiation
Uncertainty and insecurity
Homogenization of culture
Deterioration in interpersonal relations
Stresses caused by the 'pace of life'
Personal identity defined by own consumption

There are various hypotheses linking this stasis or decline in well-being to the effects of economic growth and the underlying consumerist society (Table 1). One theory is that of the 'hedonic treadmill', where no matter how much one owns, the persistent visibility and marketing of goods gives the constant feeling of being without, and an associated dysthymia.¹⁴ Another is termed 'choice anxiety', where the multitude of decisions (often trivial) that are made daily give rise to unhappiness.¹⁵ The loss of meaning and purpose as the practice of consumption replaces identity and deeper motivations and meanings in life has also been cited as a causal pathway.¹⁶ Linked to this is the phenomenon of satisfied expectations, where achievement of material wealth leaves an emptiness of hope. This was best expressed by van Goethe: 'Blundering with desire towards fruition, and in fruition pining for desire'.¹⁷ A further feature of the globalized capitalist world has been uncertainty and insecurity in areas such as employment and pensions.¹⁸ This 'footloose' existence has stretched social ties and made interpersonal relations shallower.¹⁹

Inequalities

Inequalities in both the determinants and outcomes of health have always been present in society, but have grown during recent decades in developed countries, and now appear to be accelerating (Fig. 2).²⁰

Whilst there remains debate about the mechanisms through which inequalities limit health,²¹ three facets of this argument are difficult to refute. First, income inequality drives health inequality.²² Second, income and health inequalities have increased during the long recent growth trends of gross domestic product. Third, continued economic growth using the current model is likely to lead to further growth in inequalities of both wealth and health.²³

Inequality levels amongst the most developed countries have increased steadily for the last 25

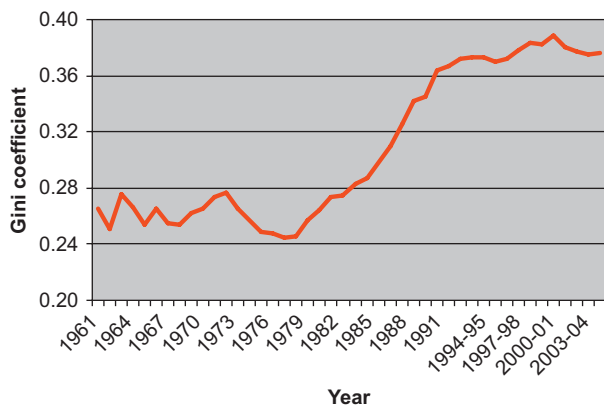


Figure 2 UK income inequality as measured by the Gini coefficient.³⁴

years, both within and between countries.²⁴ Thus, there seems to be an association between economic growth and increasing inequality between and within developed countries during the period from 1980 (although there is insufficient evidence to suggest that this is an inevitable consequence of growth for poorer countries, as China and India are driving a reduction in inequality globally).

This argument focuses on income and health, but inequalities relevant to health exist in other aspects of material capital (quality of food, access to leisure), social capital (quality of networks and social support) and cultural capital (access to experiences and ideas).²⁵

Overconsumption

The *British Medical Journal* has recently argued that obesity is out of control. The authors proposed three possible approaches:²⁶

- treat an almost exponential rise in secondary clinical consequences of obesity;
- treat the underlying obesity in a soaring number of people; and
- reverse the social and commercial changes which have conspired to make overweight or obesity more normal.

This list is interesting. The first two suggestions are achievable but enormously expensive. Unfortunately, neither would solve the fundamental problem. The third is the only adequate solution but its implementation seems improbable. It may be that we will only reverse the obesogenic consequences of our modern way of life when forced into these changes by other factors such as climate change and rising energy costs (see below).

The article quoted above appeared in the same week that the number of obese and overweight people in the world overtook the numbers who are malnourished and underweight.²⁷

Climate change and rising energy costs

The potential impact of climate change and rising energy costs transcends those of well-being, overconsumption and inequalities for two reasons. First, their potential negative impact on health is greater, and second, neither politicians nor society can ignore them.

Climate chaos could have a variety of detrimental impacts on health.²⁸ Although climatic fluctuations have historically always been with us, it is now clear that our economic activities are at least partially responsible for a recent rise in global average temperatures. This has prompted concern about rising sea levels and an increased frequency of severe weather for much of the globe, and the resultant deleterious effects that this would have on health.

Rising energy costs could lead to a global economic recession and compromise many of the systems which make the modern way of life possible. Continued unplanned growth in energy usage may result in further wars in the competition for finite resources (as has already been played out in Iraq),²⁹ and a rapid reversal of globalization. This is a situation in which prioritization of health and human well-being would almost certainly be compromised.³⁰

The question is not whether global temperatures and oil prices will rise, but by how much and how soon.³¹ Therefore, the most sturdy nail in the coffin of economic growth is that of its unsustainability.

Conclusion

Clearly, much of life will go on as before. People will get sick and some will require hospital care. Screening and other programmes will continue. However, all of these will be subject to diminishing returns when considered against the challenges of sustainability. Other activities such as the expansion of airports simply need to be put into reverse.³² This is more than a new approach to health. It is a new approach to life, but those reading this paper have a distinctive contribution to make.³³

Therefore, we need a new approach which:

- recognizes the need to fundamentally change our economy, our culture, our communities and

our individual behaviours before inevitable changes result in detrimental outcomes;

- recognizes that action needs to be taken now;
- develops an alternative vision for a society with a new central purpose, once the dangers of economic growth on the current model have been internalized; and
- begins the hard work of creating detailed values, policies, programmes and interventions which will address these challenges.

This is the generic challenge. For the community of professionals who read this journal, the distinctive contribution will be the creation of new models of public health and health care that embrace these new realities.

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