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WELL-BEING IN A SUSTAINABLE ECONOMY REVISITED

Early Policy Briefing

Policies for Healthcare

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WISER: Well-being in a Sustainable Economy Revisited

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Contents

Policies for Healthcare

1 Gigantic Healthcare Systems

American healthcare spending has dramatically increased over time. The weight of healthcare spending (public + private) on GDP in the 1980s was similar to many other industrialised countries (about 8-9%), but then suddenly increased to about 19%. American healthcare spending is exorbitant, but all healthcare systems have clear problems for economic sustainability. The weight of healthcare spending on GDP has increased in all industrialised countries. In Italy, for example, it was around 6% of GDP in the 1980s and is now around 10%. Since GDP has grown since the 1980s, this means that health spending has increased faster than other sectors of the economy. It is currently the largest sector in the economies of industrialized countries.

This gigantism, which has not been affected by the many health system reforms undertaken by western countries, poses disquieting questions regarding the sustainability of widespread access to healthcare. The increase in healthcare costs is making it increasingly difficult to sustain the universal healthcare offered by many European countries. The basis of universal healthcare is the principle of the "same standard for everyone". But it is increasingly difficult to ensure the same standard for everyone when it becomes more costly.

Healthcare spending has been absorbing an increasing percentage of our economic resources for decades and it is now out of control. Why has this happened? How can we bring it under control?

2 The Medicalization of Health

Healthcare is increasingly expensive, though many people may think that it is money well spent, because medicine gives us much in return. For example it gives us longer lives. This conviction is fed by evidence of increasing longevity, which fuels the persuasive motto of contemporary healthcare: people's health is improving. This motto feeds the popular idea, which is called the *medicalization of health,* that the protection of our heath is largely in the hands of medicine and leads to the conclusion that the best way to improve health is to spend on healthcare. The increase in longevity makes us hand over our health to medicine, because progress in medicine will make us live longer.

This sounds convincing, but it is untrue that our health is improving and that spending on healthcare is the only way to improve it.

3 Is Our Health Improving?

Progress in longevity does not seem to have reached its limit because we continue to live longer. However, in Italy and Great Britain, healthy life expectancy decreased by more than a year between 2004 and 2018 (Eurostat data). Healthy life expectancy is defined as the number of years a person lives without disabilities or illness that impede daily activities. Life expectancy is increasing but healthy life expectancy is becoming shorter in many countries. Living longer does not imply health improvement. The problem is not just living longer, but living better, and from this point of view the picture is alarming. The diverging curves of increasing longevity and decreasing healthy life

expectancy means that we are increasing the number of the chronically ill and makes the demand on healthcare unsustainable.

In any case, although the principal success of the health system is not health but longevity, the link between longevity and health spending is much weaker than is generally believed. Indeed in industrialised countries, there is no correlation between health spending and longevity. For example, per capita health spending (public + private) in Italy was approximately one-third of that in America in 2015 but longevity was 5 years longer. This can also be observed between European countries. In 2015, Italy spent about 20% less per person than Great Britain, but on average, people lived a year and a half longer.

Public opinion, therefore, overestimates the power of medicine. It is not improving health and it is not the cause of differences in longevity between countries. Why should a country that spends more on healthcare than another have worse health outcomes? And why is the increase in longevity going hand in hand with the growing army of the chronically ill who drive up the demand for healthcare?

4 Happiness and Health

The epidemiological answer to these questions is that healthcare is only one factor influencing health. Health depends on several habits such as diet, smoking, consumption of alcohol and so forth. But more important factors are relationships and happiness, which we do not foster sufficiently. Epidemiology is the science of the determinants of morbidity in individuals and populations. It has concentrated for decades on the so-called psycho-social risk factors (e.g., malaise, poverty of relationships and social comparisons). Epidemiologists have shown that happiness has a direct influence on health, and that stress, poverty of relationships and feelings of hostility, competition and envy towards others are very important risk factors.

Let us begin with happiness. The risk of cardiovascular disease, the first cause of death in rich countries, is twice as great among people who are depressed or have mental illness, and one and a half times as great among people who claim to be unhappy (Keyes 2004). The influence of happiness on health is estimated to be greater than those of smoking or physical exercise (Levy et al. 2002).

Happiness has a big influence on longevity. In the 1930s, a group of young nuns were asked to write brief autobiographies. The emotions expressed in these autobiographies were analysed 65 years later. The researchers discovered that the longevity of the nuns was accurately predicted by the quantity of positive emotions expressed in the autobiographies. Dividing the group of nuns according to whether more or fewer positive emotions were expressed, 90% of the quarter with more positive emotions and only 34% of the quarter with fewer positive emotions were still alive at an age of 85 years. Confounding risk factors are very few in studies on such homogeneous populations. The nuns had very similar life-styles, for example in terms of their diet (Danner et al. 2001).

This is only one particularly instructive example. Many studies using different methods and populations in a great range of countries have come to the conclusion that unhappiness is a very important risk factor for health. Many tracked samples of hundreds, thousands, sometimes tens of thousands of people for many years, often for decades. The subjects were initially healthy and their happiness was measured at the start of the research. The measures of happiness varied from study to

study and concerned for example: positive and negative emotions, optimism, capacity to enjoy life, capacity to smile, happiness, satisfaction with life, stress, depression, anxiety, cynicism and hostility.

This variety of measures led to univocal results. The happiness of persons in the initial observation period had a strong influence on their longevity and subsequent morbidity. For example, low initial happiness was predictive of the onset of cardiovascular disease in healthy people and its progression in unwell people (Hemingway and Marmot 1999), the onset of cancer in healthy people and the survival of unwell people (Williams and Schneiderman 2002), recovery speed after coronary bypass surgery and speed of ressuming normal activities after discharge from the hospital (Scheier et al. 1989), and the probability of survival after a stem-cell transplant (Loberiza et al. 2002). It was also predictive of hypertension (Raikkonen et al. 1999), female fertility (Buck et al. 2010), immune function, cardiovascular reactivity (Lyubomirsky et al. 2005) wound-healing (Kiecolt-Glaser et al. 2005), and mortality among the chronically ill (Guven and Saloumidis 2009), people seropositive to HIV (Moskowitz 2003), and diabetics (Moskowitz et al. 2008).

Stressful and relaxing events have major physiological consequences. Rozanski et al. (1999) showed that hypertensives had significant variations in the parameters of blood drawn before and after an earthquake. The experience of the earthquake induced an increase in blood pressure and viscosity lasting 4-6 months. Davidson et al. (2003) documented greater production of antibodies in response to influenza vaccination in persons who practise meditation than the control group. Patients on waiting lists for cholecystectomy who practiced relaxation had a lower incidence of wound infections than the control group (Holden-Lund 1988).

We therefore see that there is evidence to conclude that being happy is the best protection of health available to us. Perceived health also declines when happiness lessens. This does not necessarily imply worse objective health, but persons with a poor perception of their health ask for doctor's appointments and diagnostic tests more frequently than people with a positive perception (Argyle 2001). Doctors generally agree that anxious persons, hypochondriacs and elderly persons who live alone, who often seek the doctor just to talk to someone, which overloads the healthcare system.

Box. Why does happiness affect health?

Happiness influences health through various channels. Firstly, happier people tend to have healthier lifestyles in terms of their diet, physical activity, smoking and alcohol consumption. Secondly, they sleep longer and more deeply, which has a series of positive effects on health. Happy people also have better immune function. For example, they develop more antibodies when vaccinated against influenza (Cohen et al. 2006) or hepatitis B (Marsland et al. 2006). Their cardiovascular system works better. Unhappiness is associated with high risk of cardiovascular disease and the reason probably has to do with the well-documented lower blood pressure of happy persons. Finally, happiness is associated with a significantly lower pain perception, for example in arthritis patients.[1]

Many of these effects depend on absence of the chronic stress associated with unhappiness, since chronic stress is known to depress immune and cardiovascular function (Wilkinson and Pickett

[1] See https://www.healthline.com/nutrition/happiness-and-health#section6 for a review of studies on the link between happiness and morbidity.

2010).

5 Relational Healthcare

Epidemiologists have also studied two other psychosocial factors for decades. These are relational poverty and social comparisons. Since social comparisons are promoted by income inequality, people who live in countries with high inequality have worse health and shorter lives than those who live in more equal countries (Wilkinson and Pickett 2010). Envy is stressful and makes people unhappy.

Poverty of affective and social relationships, especially loneliness, is another big risk factor (Berkman and Syme 1979, House et al. 1988, Seeman et al. 1987, Berkman and Glass 2000, Stanfeld 2006).[2] For example, heart-attack patients who are socially isolated have almost double the probability of having another attack within 5 years than patients with a rich social life. Being isolated from others has almost double the impact on the probability of having another heart attack than classical risk factors, such as coronary disease or physical inactivity (Jetten et al. 2012).

These effects not only concern those who have serious health problems. Social isolation even makes people vulnerable to the common cold. Isolated persons have double the probability of catching a cold than socially active persons (Cohen 2005). This is surprising because isolation should protect against contagions. Other studies have shown that wounds heal faster in persons with happy marriages.

Putnam (2000) showed that people who decide for the first time to do volunteer work reduce their probability of death within 12 months by 50%. Similar results are obtained on an aggregate basis. Comparing American states, the average participation in voluntary associations is predictive of average death rates, infant mortality and deaths due to coronary disease and tumours (Kawachi et al. 1997). A health index of American states shows a strong correlation with various indicators of sociability (Putnam 2000).

Loneliness is a severe threat for health and the population groups with the highest risk are young people and seniors. For the young, loneliness mostly causes mental health problems, whereas in the elderly it translates into deterioration of physical health. Elderly people are at higher risk of mortality from any cause (Valtorta et al. 2012). An analysis of 148 studies of more than 300,000 persons for an average of 7.5 years documented the fact that those with few social connections have double the risk of mortality than those with strong social relations (Holt-Lunstad et al. 2010). This effect is greater than other well-known risk factors for mortality, such as physical inactivity and obesity, and is similar to smoking.

Elderly people who are lonely are at greater risk for pathologies typical of their age group. Social isolation is associated with increased risk of development and progression of cardiovascular disease (Hawkley and Cacioppo 2010, Knox and Uvnas-Moberg 1998) and dementia (Fratiglioni et al. 2000). A study by the Harvard School of Public Health that tracked more than 16,000 elderly people for more than 6 years showed significantly lower memory deficit in those who are more socially integrated and active (Ertel et al. 2008). A sample of 800 seniors tracked for 4 years

[2] Two fine reviews of these studies can be found in Jetten, Haslam, Haslam, 2012 and Wilkinson and Pickett 2009.

showed that isolation doubles the probability of developing Alzheimer's disease (Wilson et al. 2007).

The Harvard Study of Adult Development is the study that observed the lives of individuals over the longest period.[3] Various generations of researchers tracked the lives of 724 males for 75 years. This study is exceptional for the amount of information about entire lives collected. Year after year, the researchers interviewed the participants, spoke with their children, collected their medical records, took blood samples, performed brain scans and filmed them in conversation with their wives about their most intimate anxieties. During their lives, some participants rose on the social scale while others fell, but this was not what predicted their future health and happiness. It was their bonds with family, friends and community. Those who had better relationships lived more happily, for longer and in better health. Those with poor affective and social relationships had less happy and shorter lives, and as they grew older their physical health and mental capacity declined more rapidly. The various research who took over from each other summarised the results with phrases like: "good relationships make people happier and healthier", "loneliness is a killer" and "happiness is love".

Increasing awareness that relational poverty is an important risk factor for health has recently led to the creation of a Ministry of Loneliness in Great Britain. This decision was backed by solid evidence. Nine million English people suffer from social isolation, almost one in six, and at least 200,000 elderly persons claim not to have spoken with friends or relatives in the last month (Kentish 2017).

Box. Relationships and health

It has been shown that poor social relationships affect the immune system, stimulating rapid production of inflammatory agents that favour the development of many diseases. A sample of 122 persons noted their positive and negative social interactions (such as having a pleasant time versus fighting with friends, partner or relatives) for eight days. In the following four, they underwent saliva sampling to measure concentrations of two pro-inflammatory hormones. People who had negative interactions showed higher concentrations of these hormones than those who had positive interactions. The study showed that production of inflammatory hormones in response to unpleasant interactions with people seems to happen on an almost daily basis. Each stressful interaction seems to take away a little of our health (Chiang et al. 2012).

The study of isolated people also showed the role of hormonal and neuroendocrine effects on gene transcription and cellular immunity, linking isolation and morbidity (Hawkley and Cacioppo 2010). Other studies suggest that social isolation is strongly associated with less healthy life-styles, such as poor diet, drinking and smoking, and lack of exercise (Hawkley et al. 2003).

The effect of relationships on health is presumably mediated by their effect on happiness. Solitary people have worse health because they tend to be unhappy.

[3] http://www.adultdevelopmentstudy.org/, https://www.youtube.com/watch?v=8KkKuTCFvzI

6 Conclusion: Happiness as Prevention

The arguments presented in this section provide an answer to the question of how to make healthcare spending sustainable. To bring healthcare spending back under control, it is fundamental to limit the demand for healthcare. So far, this has largely been attempted by information campaigns on the advantages of not smoking, healthy eating and physical exercise.

However, the evidence suggests that happiness is more important than these healthy/unhealthy habits. The healthcare system is the terminal of distress, in the sense that distress tends to be transformed into health problems. Reducing malaise is essential for controlling health expenditure, because it is essential for limiting morbidity. Since human relationships are so important for happiness, relational policies are a way to limit health spending.

This suggests that prevention should occur outside the health system and should concentrate on the promotion of happiness. There is nothing new in this. The main improvements in healthcare have often happened outside health systems. In Europe, the great leap forward in longevity happened in the second half of the 19th century, well before the discovery of antibiotics. It was due to improved hygiene, living conditions and nutrition.

Advanced societies bear the burden of an erroneous distribution of healthcare spending, which favours treatment at the expense of prevention. This pernicious distribution is closely linked to economic incentives. Nobody sells quality of life but many sell medical goods and services. Furthermore, prevention does not mean mass screening. The first form of prevention is to promote happiness through relational policies.

In particular, it is important to reduce loneliness because socially isolated persons tend to be very unhappy. Their risk of morbidity is therefore much higher than that of people with rich relationships. The sustainability of healthcare expenditure is threatened in societies in which loneliness is a mass problem, such as in the US.

For long-term prevention it is fundamental to improve the relational life of young people, which is the population group with the highest risk of loneliness. Social skills and the emotional intelligence that influence a person's relationships throughout their life are largely acquired in infancy and adolescence. In these periods, solitude tends to put young people on a path where they are more likely to experience loneliness and conflict. A similar effect is created by early acquisition of consumer values. Solitude and consumer culture in young people are alarm signals for long-term morbidity.

Seniors are the other population group at high risk for solitude and at the same time they are the greatest burden for healthcare systems. The reduction of solitude in the elderly should be considered a priority for reducing the demand for healthcare in the medium term. Japan offers the best example of this. The extraordinary results in terms of longevity and health of seniors obtained in this country are based on an active policy that involves the elderly in social, physical and mental activities. These policies are promoted comprehensively by local government. The national government runs information campaigns that underline the importance of human relationships for the health of seniors. The advantages of these policies are plain to see. Italians see old people in wheelchairs with mental problems and carers, whereas in Japan European visitors are greeted with the sight of very elderly persons walking independently in the streets.

Japanese policies prevent seniors from losing their autonomy and it costs much less than ignoring them until they become infirm, by which time they need a carer, a rest home, or hospitalization (i.e. very expensive facilities with sophisticated technology and specialised personnel). Per capita healthcare expenditure in Japan is similar to that of Britain, but their longevity is two and a half years longer. Since the health risks of loneliness for seniors are well known, it is difficult not to see the shadow of the immensely influential pharmaceutical industry in the medicalisation of old age. The Promised Land for Big Pharma is an ageing population subject to increasing loneliness.

The approach of most European societies regarding the elderly does not foster their happiness or health and is extremely expensive. It promotes a widespread loneliness in which healthcare and therefore the pharmaceutical sector play major roles. Healthcare is a paradigm of defensive growth, in which the economy repairs the damage done by a form of social organisation that produces unhappiness.

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