Editorial

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Unhealthy consumption threatens sustainable development

Consumo não saudável ameaça o desenvolvimento sustentável

INTRODUCTION

Recent studies have shown that infectious diseases retard economic development and in some cases have a negative impact on the environment.⁸ Conversely, investing in infectious diseases control can contribute to poverty alleviation and an improvement in the productivity of the workforce as well as the scholastic performance of students. Less attention has been given to the complex relationships that exist between the determinants of many chronic and emerging diseases and sustainable development. At a time when 60 percent of global deaths are due to such conditions - a figure that will increase over the next 20 years -, it becomes crucial to *consider how to simultaneously reduce the future burden of disease and ensure the implementation of an ecologically sustainable path of development*.

The upcoming World Summit on Sustainable Development (WSSD) in Johannesburg provides an opportunity to explore this issue and develop specific recommendations for governments, non-governmental organizations (NGOs), and the private sector to consider as the final text is developed.

We outline the need for rapid action in respect of nutrition, energy, mobility and tobacco, and indicate the consequences of failed action for health, the environment and development. Epidemiological transition does not just happen: it is the result of a family of economic and social transitions. Each of these is amenable to policy interventions.

CHRONIC DISEASES ARE CONTROLLABLE

Chronic diseases such as cancers, heart and lung diseases take decades to manifest. They arise typically in populations over the age of 40 and after individuals and populations have been exposed to, or have consumed, harmful products for at least one or two decades. By the time diseases become common in populations, the preventive potential has been lost and demands for treatment often permanently skew resource allocation in health systems to these problems.

There are many examples of good practices whereby countries with high levels of chronic diseases have reduced them dramatically. For instance, in Norway, Finland, Canada, and Australia, the epidemics of heart disease and lung cancer have declined over the last decade.⁵ This has been due to the introduction of changes in food policy, effective tobacco control, improved attention to transport and energy policy and a long-term commitment to improving the mental health of populations. Strong intersectoral action backed by fiscal policy, regulation, legislation, health education and public information as well as responsive health services, have together made the difference. These same countries are among the best internationally in achieving true "sustainability" according to a recent index published during the 2002 World Economic Forum.

NUTRITION TRANSITION

Patterns of food consumption are changing fast.⁶ These changes are exerting direct and indirect effects on the environment. There are now 3.3 billion cattle, sheep and goats on range-land that has become increasingly

vulnerable. There has been a marked deterioration in the quality of grasslands in Africa, Middle East, China and Central Asia. The combination of over-grazing and over-plowing has led to massive soil erosion and a generation of dust storms so severe that in recent years dusts from central China have reached Korea, Japan and the US. The increased demand for animal protein, especially beef and pork, is driving the process. If China were to continue on its current path and consume pork at the same per capita rate as the US, it would require as much grain as the entire US harvest at present.¹

At the same time, in response to an increased demand for fish, global fisheries from Thailand to the Chesapeake Bay to the North Sea are collapsing. Using the Chinese example again, if China were to consume the same per capita amount of fish as the Japanese, they would consume the entire world's fish catch.¹ Most countries rely heavily on grains as a staple food. Yet, the productivity of croplands has been under pressure for a decade and it is expected that, even with the new biotechnology crops, this will only marginally increase in future. In response to increased demand, farmers have diverted many of the world's major waterways and built irrigation systems. The combination of these practices has resulted in severe water shortages in some countries and increased the spread of the vectors for many infectious diseases in other countries. Increased demand has also led to deforestation. Additional factors associated with this are the demand for wood, and forest destruction to plant and cure tobacco. Deforestation reduces biodiversity of an entire ecosystem from which future nutrient-rich foods and pharmaceuticals could derive.

There are 1.1 billion people who are undernourished⁹ and a similar number who are obese ¹⁰ Three-quarters of the people underweight live in rural areas on marginal lands; almost all of the obese people live in cities; often those who are obese live together with those who are underweight; urban poverty is common to all forms of malnutrition. Obesity predisposes people to heart disease, diabetes, certain cancers, and hypertension. While dietary causes are important, physical activity levels are also crucial, as will be discussed.

In summary, demand for protein, tobacco and fat undermines health gains associated with reduced infectious diseases and poses significant threats to the world's ability to feed the very poorest people and also poses severe threats to the fragility of many ecosystems. In contrast, increased production of a more diverse range of fruit and vegetables, ideally closer to consumers' homes, would yield potent health and environmental gains.

The current course of development, which regards food policy as ecologically neutral and disregards the impact on population health, needs to be changed. The recent decision in Doha to review the global systems of agricultural subsidies, and the current debate underway within Europe with respect to changing the Common Agricultural Policy, should be seen as opportunities to restructure the agricultural sector so as to ensure it meets peoples' current needs in an equitable way and to prevent adverse effects. Some policy changes necessary to achieve this include restructuring of protein economy, giving more emphasis on poultry and fish-farms, reducing tobacco production, incentives for developing countries to consume and export a diverse range and increased quantity of fruit and vegetables, and promoting urban gardens.

MOBILITY TRANSITION

Levels of physical activity have declined worldwide, particularly in the cities. This has led, along with the nutrition changes mentioned above, to an explosion in levels of obesity, especially in developing countries. Surveys among children show a tripling of obesity levels among Chinese children over the last decade, and sharp increases in levels among children from countries as diverse as Malaysia, Brazil, South Africa and Poland. The reduction in physical activity, when combined with increased consumption of a range of energy-dense products, including soft drinks, has led to profound increases in obesity.² This has been documented with great detail among populations of the Pacific Islands and Caribbean states. In those countries, WHO studies show that the costs of treating the complications of diabetes may reach 25% of the total health budget.¹¹

Transport policy is a crucial factor in reduced physical activity, as are reduced school-based exercise programs. The explosion in motor vehicle use in cities where public transport and/or bicycles and walking were the norm demands urgent attention. The increased use of motor vehicles has also led to a documented increase in motor vehicle and pedestrian-related injuries and deaths,⁴ increased levels of air pollution that have become so severe it has forced authorities to cut back on motor use during critical periods, and generally increased levels of stress associated with transport. A "healthy" transport policy is urgently needed, especially in countries where motor vehicle use is associated with an increase in wealth. If China consumes oil on a per capita basis equivalent to that in the US today, it would require more than the total global oil output and lead to a doubling of the global emissions associated with motor transport. Clearly, transport policy needs to change.¹

A policy that stresses the importance of public transport, combined with safe bicycle and walk paths, would result in less obesity, cleaner local air, less frustration and safer neighborhoods. To achieve this though will be difficult and require strong concerted political leadership supported by public demand, both combined with new economic incentives and disincentives.

ENERGY TRANSITION

In many developing countries, the dominant form of energy at home is associated with harmful consequences for health. Biomass stoves increase the risks of respiratory disease and burns,⁷ especially in children and women; liquid fuels increase the risks of poisoning and severe pneumonia to mention just a few. Electrification, however, offers many opportunities for health improvements: clean air and less respiratory disease; less burns and poisoning; better use of appliances to store foods and less dependence on salting and smoking as a means of storing foods which lead to certain cancers; and potentially better cooking practices.³ There are downsides to consider: first generation appliance users who are poorly informed about health risks may shift rapidly to increase their alcohol and high fat consumption. Television usage is associated with increased marketing of foods high in fats, sugars and salts as well as increased exposure to violence in entertainment.

The future source of electricity needs to be carefully considered. Continuation of excess reliance on fossil fuels will accelerate the process of global warming, per se a major threat to human health. Rather, increased use of cleaner forms of electricity, from wind to solar to fuel cells, needs to be given higher priority in terms of research and implementation. These negatives for health are all potentially manageable through a combination of legislative and educational measures. The additional gains of electricity can profoundly increase learning at home (better lighting, access to the Internet), the quality of health services and safety in the streets.

TOWARDS INTEGRATED SOLUTIONS

Food policy that promotes the consumption of a balanced diet rich in fruits and vegetables, transport policies that encourage bicycle use and maximum use of public transport, expanded use of cleaner forms of energy and reduced tobacco smoking, together would prevent an emerging double burden of disease in developing countries and simultaneously contribute to a more sustainable path of development. Getting there will require a shift in the way economists value health and the environment, and the time span set to justify investments. A longer-term perspective that places human and ecological health more central to development would make many solutions proposed here possible.

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