## **Economic Impact**

Domniţa Oana Bădărău

Health care costs are increasing every year, leading to increased expenditure percentages in the gross domestic product (GDP), both in developed and developing countries. Factors such as aging populations, increased diagnoses of cases of life threatening diseases, infectious disease rates, social disparities, and economic arrangements deepen differences in health distribution within and between countries. Scarce resources add to these factors and emphasize the central role played by a continuous and steady commitment to ensure through coherent policies access to financial means in order to prevent, treat, and promote health in a population. Despite efforts, technological progress in medicine and a rising life expectancy in the world's population are affected by increasing morbidity rates leading to burdensome costs for care without better health outcomes.

The circumstances of people's lives, from birth until death, their upbringing, morbidities, and comorbidities, as well as the living environment, level of education and political structures, public health policies and health care, all constitute determinants of health. A 2001 report of the World Health Organization's Commission for Macroeconomics and Health (CMH) concluded that substantial resource allocation for health is paramount within economic development processes. A different 2008 report of the Commission on Social Determinants of Health concluded that vast differences in the distribution of wealth and differences in economic settings are responsible for negative health outcomes, but that the root of such outcomes lies in social inequities characterizing all societies, whether developed or in low-income settings.

Economic development is intertwined with social aspects; it may be a determinant or an aggravating factor of social inequalities that include gender inequities, education, and health care allocation. A direct connection exists between health and economy, both influencing and producing significant effects on the other. It can be concluded that health impacts economy by affecting the working force and

D.O. Bădărău (⊠)

Institute for Biomedical Ethics, University of Basel, Basel, Switzerland e-mail: domnita14@gmail.com

210 D.O. Bădărău

increasing social costs; the development of an economy lays the foundation for the efficient allocation of resources to combat disease, the containment of disease in an area, the development of prevention programs, and the availability of medical care. Therefore, there can be an economic impact defined by two opposite circumstances: an economic boom or a financial crash. In an economically prosperous situation, resources can be allocated to improve health, to support public health programs, and to reduce health disparities, whenever there is adequate political will and policies are effectively implemented. On the contrary, in a poor economic environment, scarce financial resources lead to insufficient means to provide the required health care personnel, the appropriate medical technologies, and adequate resources to tackle the public health problems that affect specific population groups. In such an environment, resources wither and important public sectors provide poorer services, particularly in the domains of education and health care. As a result, differences in health between social segments are exacerbated, causing more inequities.

Social determinants can also be a contributing factor to the economic status of individuals. Discrimination against people tested for HIV or diagnosed with this infectious virus has been a significant issue from the beginning of the epidemic and leads to medical, legal, and social challenges. The HIV/AIDS epidemic is present in many countries, including developed ones. According to the 2010 National HIV/AIDS Strategy, in the USA there are more than 1.1 million people living with HIV. Given the stigmatization and negative outcomes of disclosing a patient's positive status, the USA adopted disclosure laws and legislation against discrimination. Negative effects of a HIV-positive diagnosis extend beyond the psychological stress of being stigmatized and dealing with the symptoms. The risk of being laid off or increased health care costs not covered by health insurers add to a HIV-positive patient's burden.

Internationally, HIV is a disease associated with socioeconomic inequities, affecting a higher proportion of people living in a poor economic environment. This is also the case in the USA, where HIV infection among minority groups and people from lower socioeconomic classes is considerably higher. The economic impact of the disease is proportionally greater within ethnic and racial groups, especially those living in poor neighborhoods and without stable housing. Socioeconomic status can be a risk factor for contracting HIV and influence the health care that individuals will receive after diagnosis. The impact of lower socioeconomic status has on health patterns and health care is profoundly negative and increases health and social inequities. However, individuals with a higher socioeconomic status are likely to be burdened by the increasing health care costs after the HIV-positive diagnosis. Access to high-quality and life extending care is very expensive and unlikely to be covered or to be provided throughout the disease's course by health insurance. Additionally, from diagnosis and after the individual develops AIDS, health care costs are increasing significantly and steady. The ability of a HIV-positive person to afford the standard of care that will provide the highest quality of life possible and to extend life is closely tied to his or her employment. A positive HIV diagnosis creates vulnerability for the diagnosed individual who is Economic Impact 211

at a greater risk of discrimination and stigmatization, despite federal law, many state laws, and principles of human rights prohibiting discrimination. It is acknowledged that HIV-positive people whose status is disclosed are at a greater risk of becoming unemployed and suffering marginalization. Legislation has been put in place to protect people diagnosed with HIV. Human rights regulations and international legislation exist, but the individual suffering discrimination must present his or her claims before courts. These circumstances add to the burdens suffered by a HIV-positive person and increase the economic impact. In addition to health care costs and loss of income, he or she would have to have the resources to carry through a legal claim.

A different aspect of the economic impact suffered by individuals diagnosed with HIV is represented by the illness progression. As the disease progresses, HIV can result in severe disabilities, requiring additional health care, days of hospitalization, and additional health care costs. In advanced stages of the disease, the HIV-positive individual is unlikely to be able to work normally and therefore his income will decrease. Social support is necessary to cover all costs, including housing, aliments, health care, and nursing, while the individual is less capable to care for himself, both financially and physically. This puts a severe pressure on health budgets, thereby requiring countries to develop and implement national strategies to combat HIV and AIDS.

The 2001 CMH Report, in recognition of the connection between economic development and health, encouraged supplementary resource allocations for global health research and the provision of services in areas devastated by diseases such as HIV, malaria, and TB. In a 2003 Commission report, health is reaffirmed as being a fundamental human right and a cornerstone in reducing poverty levels between countries. Public health systems worldwide are under the pressure of major diseases and mortality rates, combined with increasing morbidities that dry out resources both in the short and long terms. In addition to this, economic crises such as economies in recession affect resource allocation and deepen the financial shortage in fighting disease at a global scale.

Beginning in 2007, the financial markets took a downward trend as a result of the inflated real estate boom of the past years, impacting economies worldwide. Systemic shocks hit the markets throughout the world up until the present time. The crisis has been exacerbated in the European zone, with States like Greece and Italy experiencing severe recessions. These crises have adversely affected health and health care in various countries.

The current situation in Greece illustrates the impact of the economy on health care. A letter to *Lancet* published on October 2011 reported that, based on data collected from 2007 until 2009, there had been a significant decrease in the number of Greeks who would see a doctor for treatment of health-related problems. The proportion of people not seeing a dentist or a mental health specialist is particularly high. However, despite the initial assumption that these decreased rates were due to reduced household incomes, significant cuts in wages, and increasing unemployment rates amongst the young population, the report indicated that the negative effects on health care were more closely related to the health system's lack of

212 D.O. Bădărău

capacity to meet the demand. Cuts of up to 40% in hospital budgets led to increased waiting times to see a physician, which would especially discourage people travelling from other localities for doctor's appointments to seek medical care. Additionally, a significant rise in mental health issues with overwhelmingly high suicide rates has been observed. This can be explained by the everyday stress and insecurities caused by the economic situation. Greek suicide helpline callers have routinely reported that they are overwhelmed by the pressure of loans and an inability to pay them.

A particularly worrisome health indicator for Greece is the number of new HIV infection cases, which is evidencing an increasing trend. The numbers are higher among injection drug users. The underfunding of needle-exchange programs and psychosocial therapies for drug addiction, along with higher rates of prostitution and unprotected sexual behaviors, have contributed to higher HIV transmission rates. The current economic situation is affecting health from two sides: by fostering increases in behaviors such as prostitution, drug use, and injection drug use with contaminated injection equipment and by reducing the availability of financial resources at both the individual and societal levels to cope with increasing infection rates and health problems.

Among developing countries, the populations most affected by HIV/AIDS live in African countries, where the HIV infection rates exceed 50% in some populations. Efforts have been made in developing countries to facilitate access to antiretroviral therapies through governmental programs, the work of nongovernmental organizations (NGOs), and international funding sources. These efforts face serious constraints in relation to the high price of antiretrovirals drugs (ARVs) and create a need for cheaper alternatives.

Generic drugs could represent a substitute and provide access to such HIV infection treatments, as ARV prices are increasing. Higher costs for producing newer lines of ARVs limit treatment access especially in developing countries. The implementation of the World Trade Organization's (WTO) Agreement on the traderelated aspects of intellectual property rights (TRIPS) had a negative effect and has contributed to the increased prices. Under this agreement, cheaper, generic drugs would face export restrictions and the producing companies have been compelled to respect original drug pharmaceutical companies' patents. Due to the current world economic turmoil and the impact it has on the distribution of financial resources, the capacity to offer antiretroviral treatment to meet the HIV-related health needs in developing countries seems compromised.

Developing countries that have successfully addressed the issue of providing universal access to ARV therapy have committed enormous financial resources to achieve this goal. In doing so, States like Brazil and Thailand changed the legislative provisions in order to provide population treatment coverage, build public structures capable of producing ARVs, and motivate social involvement and action to support the newly founded health system. Though older lines of ARVs are not protected by patents and make possible the nationally produced generic drugs that are less expensive, the universal coverage represents a burden on States' budgets. This model was utilized successfully by Thailand and Brazil until they were

Economic Impact 213

confronted with obligations under various trade laws. Negotiations with pharmaceutical companies that produce expensive, newer drugs ensured that the prices will be lower, but they remain unaffordable for universal coverage.

Years before the current economic crisis, wealthier developing countries were struggling to meet the demand of HIV patients and pay for the expensive drugs delivered by drug companies owning the ARV patents. Dramatic economic impacts on health care are to be expected both in developing and developed countries, as health budgets became increasingly strained and unable to absorb the health care costs.

Related Topics: World Trade Organization.

## **Suggested Reading**

- dos Santos Pinheiro, E., Ceva Antunes, O. A., & Fortunak, J. M. D. (2008). A survey of the syntheses of active pharmaceutical ingredients for antiretroviral drug combinations critical to access in emerging nations. *Antiviral Research. Review*, 79. doi:10.1016/j.antiviral.2008.05/ 001.
- Ford, N., Wilson, D., Costa Chavez, G., Lotrowska, M., & Kijtiwatchakul, K. (2007). Sustaining access to antiretroviral therapy in the less-developed world: Lessons from Brazil and Thailand. *AIDS*, 21(Suppl. 4), S21–S29.
- Houston, M., Day, M., de Lago, M., & Zarocostas, J. (2011). Health services across Europe face cuts as debt crisis begins to bite. *British Medical Journal*, 343, d5266. doi:10.1136/bmj.d5266.
- Karamanoli, E. (2011). Debt crisis strains Greece's ailing health system. *Lancet. World Report*, 378(9788), 303–304.
- Kentikelenis, A., Karanikolos, M., Papanicolas, I., Basu, S., & McKee, M. (2011). Health effects of financial crisis: Omens of a Greek tragedy. *Lancet. Correspondence*, 10. doi:10.1016/ S0140-6736(11)61556-0.
- Marmot, M., Allen, J., & Goldblatt, P. (2011). Building of the global movement for health equity: From Santiago to Rio and beyond. *Lancet*, 19. doi:10.1016/S0140-6736(11), 61506-61507.
- Triantafyllou, K., & Angeletopoulou, C. (2011). Increased suicidality amid economic crisis in Greece. *Lancet. Correspondence*, 378(9801), 1459–1460.

## Suggested Resources

Crowell, V., & Leotsakos, A. (2003). Increasing investments in health outcomes for the poor. Second Consultation on Macroeconomics and Health. Geneva, Switzerland: World Health Organization. Retrieved December 28, 2011 from http://bvs.per.paho.org/bvsacd/milenio/salud.pdf