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## Health as a factor in economic and social development: Indicators, inequalities and social impacts

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### Abstract

Health is a fundamental parameter of social and economic development, as it directly affects productivity, education and quality of life. The study examines health indicators as a means of assessing the level of development and highlights the differences between rich and poor countries.

It explores the effects of socio-economic inequalities, access to health services and public policies on human well-being and economic development. Health as a public good is of particular importance, as prevention and support policies contribute to reducing inequalities and improving overall quality of life.

The study combines a historical and contemporary approach, examining indicators such as life expectancy, child mortality and access to basic health services. At the same time, it highlights the role of health in enhancing productivity and sustainable development. The differences between rich and poor countries underscore that equal access to health services is a critical factor for social and economic cohesion.

**Keywords:** health services; Sustainable development; Productivity; Economic development; Social development inequalities social impacts

### 1. Introduction

The relationship between health and economic development has emerged as a critical parameter in the contemporary development dialogue (Bloom and Canning, 2000). Improving health levels increases productivity, reduces social inequalities and contributes to long-term economic stability (Bhargava et al., 2001). As Hamoudi and Sachs (1999) point out, good health is not only a result of economic progress, but also a driving force behind it. Human health is also a key factor in the development process, while Oikonomou (2010) points out the spatial dimension of inequalities, which leads to differences in access to and quality of health services (Vaitsos and Bartzokas, 2004).

Health is not simply a biomedical condition or a statistical indicator of well-being, but a multidimensional cultural and social good that reflects the quality of life, collective responsibility and level of civilisation of a society. From ancient times to the present day, the concept of health has been closely linked to humans as cultural beings, with the values, customs and knowledge that shape their humanistic essence.

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Health — physical, mental and social — cannot be separated from culture, as it is a key link between humans, the community and the environment. Societies that invest in cultural education and artistic creation promote not only mental well-being but also collective resilience in the face of social and environmental challenges. The cultural dimension of health, as reflected in the works of Maniou, et al., 2025c), brings to the fore the need for a holistic and human-centred definition of health, where science, art and society coexist creatively

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## 2. Health as a Public Good

Health is a fundamental human right and a key pillar of social cohesion, development and prosperity. Treating it as a public good is directly linked to the concept of social justice and universal access to health services, regardless of socioeconomic status. On the contrary, the privatisation of health services has sparked heated debates about the effectiveness and fairness of healthcare systems.

As Angell (2008) points out, the experience of the United States — where healthcare is largely based on private insurance — shows that privatisation does not necessarily lead to improved quality or reduced costs. On the contrary, it creates inequalities in access, increases administrative costs and strengthens the pharmaceutical industry at the expense of patients. In such a context, health tends to become a commodity, undermining its social character and collective responsibility for the well-being of all citizens (Angell, 2008).

In contrast, as Anderson and Hussey (2001) point out, health systems based on public funding and service provision have better health indicators, higher life expectancy and lower infant and maternal mortality rates. Their study, which compared eleven industrialised countries, showed that states with universal public health systems achieve more efficient resource allocation and higher levels of social welfare.

Health, therefore, must be considered a public good with collective responsibility for its management and protection. Investing in public health systems has not only a moral dimension, but also a purely economic one; societies with strong public prevention and care networks show greater productivity, reduced social inequalities and resilience to crises, as demonstrated by the COVID-19 pandemic (World Health Organisation, 2022. World Health Statistics 2022).

Furthermore, according to the World Bank (2023), universal health coverage is a key sustainable development goal (SDG 3) and a prerequisite for social and economic stability. Countries that ensure access to quality health services without financial barriers achieve higher levels of prosperity and lower poverty rates (World Development Indicators).

In summary, health as a public good is not only a moral and political obligation of states, but also a strategic investment for sustainable development. The experience of recent decades shows that public health systems promote social cohesion, economic resilience and quality of life, while excessive privatisation exacerbates inequalities and weakens collective protection.

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## 3. Health, Productivity and Economic Development: A Long-Term Approach

Health is a fundamental factor in productivity and, by extension, economic development. According to Bloom, Canning and Sevilla (2001), improving health indicators strengthens human capital by increasing labour market participation and improving labour productivity. Similarly, Alsan, Bloom and Canning (2006) emphasise that good health attracts foreign direct investment (FDI) to low- and middle-income countries, contributing to the formation of more stable and competitive economies.

Health acts, as Doeksen (2006) points out, as an “economic engine”. Investments in health infrastructure and services create direct employment, strengthen the local economy and support the development of social and cultural infrastructure. Fogel (1993, 1997) offers a macro-historical perspective, showing that improvements in nutrition, child survival and public health were a prerequisite for the Industrial Revolution and modern economic development.

In more recent studies, the importance of health extends beyond the economy to include mental well-being and social cohesion. Pagkalos et al. (2025) highlight the role of literary festivals in promoting mental health and cultural development, while Maniou et al. (2025a) point out that “literary parks” and cultural initiatives can serve as business models that link culture with economic development.. The same studies emphasise that cultural activity, when linked to health, contributes to the creation of sustainable communities with higher levels of social well-being.

The combined approach of classical economic theory with contemporary cultural and social approaches demonstrates that investment in health, both physical and mental, is a strategic tool for enhancing productivity, labour market participation and long-term economic growth. At the same time, the integration of cultural actions creates a broader framework for sustainable development, where the economy, health and culture are mutually reinforcing (Maniou et al., 2025b; Pagkalos et al., 2025).

Health is not only a social good, but also a critical factor in economic and cultural development, linking human well-being to the sustainability of societies and local economies.

Finally, it's critical to emphasize the beneficial and influential role that digital technologies play in the field of health education and economic development. Mobile devices (41-43), a range of ICT apps (44-48), AI & STEM ROBOTICS (49-50), and games (51-52) are examples of the technologies that facilitate and improve educational processes including evaluation, intervention, and learning. Additionally, the use of ICTs in combination with theories and models of metacognition, mindfulness, meditation, and the development of emotional intelligence [53-66], speeds up and improves educational practices and results, especially for health education and economic development.

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#### 4. Health Indicators in Rich and Poor Countries

Health indicators are an essential tool for assessing a country's social progress and economic development. They reflect not only the level of medical care, but also quality of life, education, nutrition and social infrastructure (World Health Organisation, 2024). A comparison between rich and poor countries reveals stark inequalities, which stem from differences in socio-economic conditions and

Life expectancy at birth remains one of the most reliable health indicators. In developed OECD countries, the average exceeds 80 years, while in many low-income countries in sub-Saharan Africa it does not exceed 60 (Miladinov, 2020). This disparity is attributed to epidemics, infant mortality, poor quality medical care and poverty.

Similarly, infant and child mortality is a critical indicator of social development. In developed countries, it ranges between 3–5 deaths per 1,000 births, while in some poor countries it can exceed 50 (Barros et al., 2020). The main causes are related to malnutrition, lack of clean water and inadequate prenatal care.

Maternal mortality remains one of the most dramatic indicators of inequality. While in high-income countries maternal deaths do not exceed 10 per 100,000 births, in poor countries this figure exceeds 400 (WHO, 2023). The causes are related to inadequate access to hospitals, a lack of trained midwives, and limited use of contraception (Tangcharoensathien et al., 2024). Rad et al. (2025) point out that these inequalities are exacerbated by social factors such as poverty, education, and gender inequality, and are linked to the overall level of social justice and governmental stability.

Access to medical services is a fundamental component of the differences between rich and poor countries. OECD countries have approximately 3.5 doctors per 1,000 inhabitants, while many African countries have less than 1 per 10,000 (World Bank, 2024). This inequality is exacerbated by infrastructure deficiencies, limited funding, and brain drain from poor to rich countries (Peters et al., 2008;

Nutrition indicators also vary greatly. Developed economies are seeing an increase in obesity and chronic non-communicable diseases (diabetes, heart disease), while poor countries are dominated by malnutrition and micronutrient deficiencies (WHO, 2023). Research by van Deuren, van Oorschot & van Ingen (2014) showed that income inequality significantly affects nutrition and physical condition, leading to an increased risk of disease. Inequality is not only about income levels but also the distribution of social resources, which makes poor countries more vulnerable to public health crises.

Rich countries mainly face chronic noncommunicable diseases (NCDs), while poor countries continue to be affected by infectious diseases such as malaria, tuberculosis, and HIV/AIDS (O'Donnell et al., 2024). This 'double burden' exacerbates inequality, as poorer countries have limited resources for prevention and treatment.

Health inequalities are not solely the result of medical factors. According to Sibanda and Doctor (2013), socioeconomic determinants—such as education, employment, housing, and social welfare policies—play a decisive role in shaping health indicators. In many low-income countries, the poorest groups remain excluded even from basic primary care services (Tangcharoensathien et al., 2024).

4.1. Comparative Health Indicators: OECD vs Sub-Saharan Africa (2024)

Comparative Table Source: World Health Organization (WHO Global Health Observatory, 2024), World Bank (World Development Indicators, 2024)

Table 1 Comparative Health Indicators: OECD vs Sub-Saharan Africa (2024)

Health Indicator (2024)	Rich Countries (OECD)	Poor Countries (Sub-Saharan Africa)
Life expectancy at birth	80–84	58–63
Infant mortality (per 1,000 births)	3–5	45–60
Maternal mortality (per 100,000 births)	5–15	400–600
Access to clean water (%)	>98	55–65
Access to basic health services (%)	>95	<50
Doctors per 10,000 inhabitants	25–40	0.5–2
Malnutrition (% of population)	<3	20–25
Child vaccination rate (basic vaccines) (%)	>95	65–75
Main causes of death	Heart disease, cancer, diabetes	Malaria, tuberculosis, HIV/AIDS
Health expenditure (% of GDP)	8–10	3–4

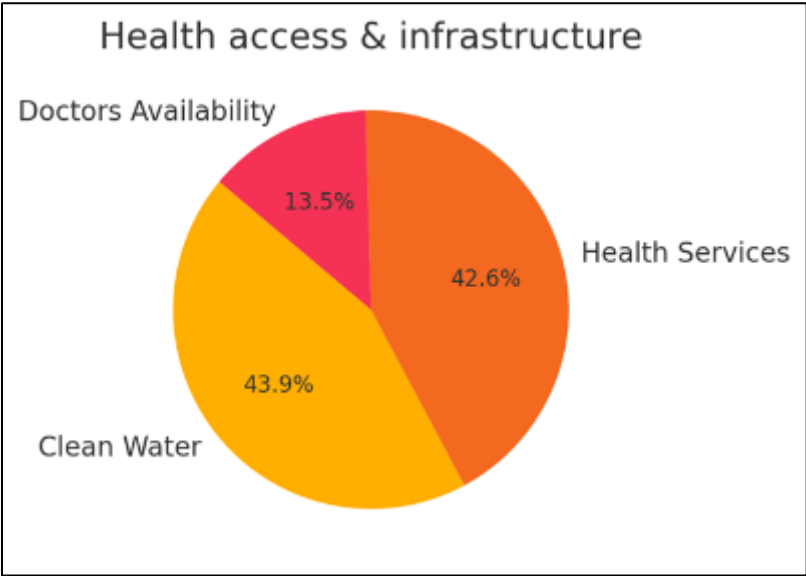
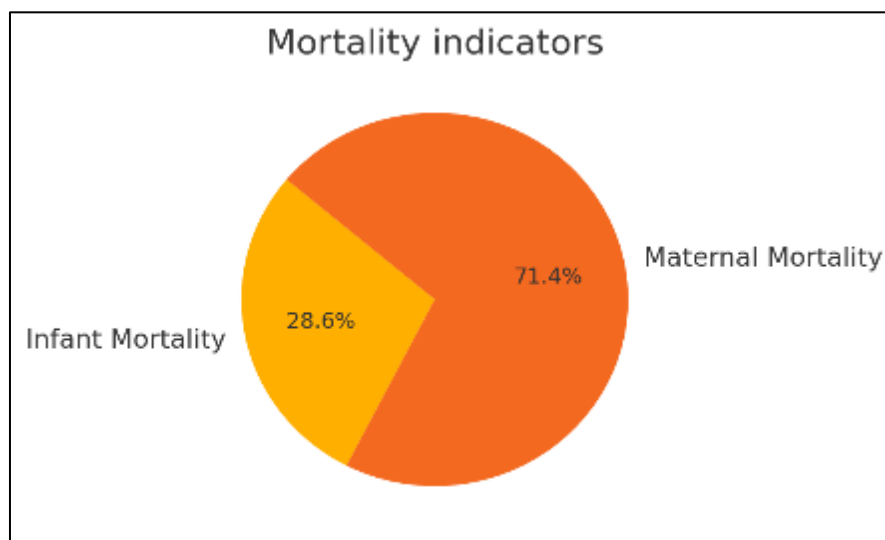


Figure 1 Health Access & Infrastructure

This Figure shows that OECD countries have almost universal access to clean water and health services, with a much higher density of doctors. In contrast, Sub-Saharan Africa faces severe shortages in medical staff and infrastructure. These gaps underline how healthcare access remains a core determinant of population health outcomes.

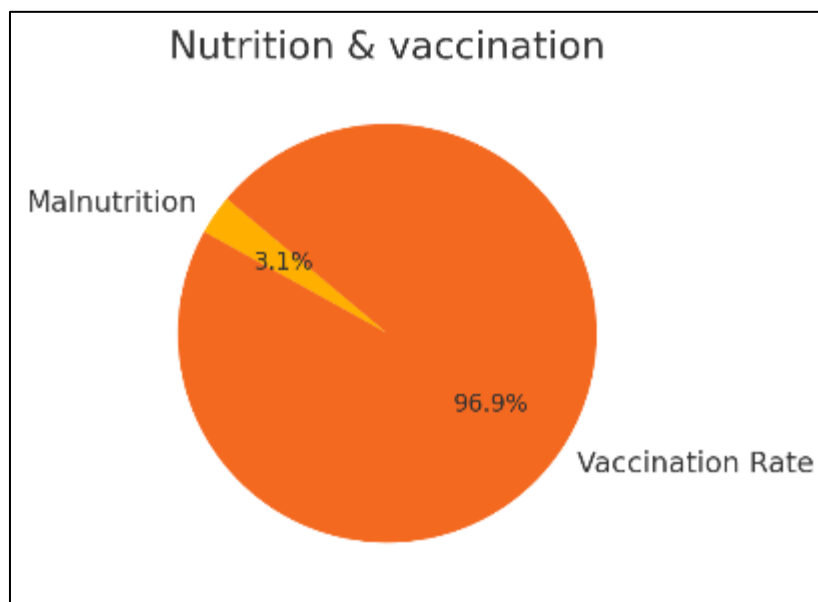
#### 4.1.1. Mortality indicators



**Figure 2** Mortality Indicators

Infant and maternal mortality rates are dramatically lower in OECD countries. High mortality levels in Sub-Saharan Africa reflect limited prenatal care and poor medical access. Reducing these rates requires targeted maternal health programs and improved healthcare coverage.

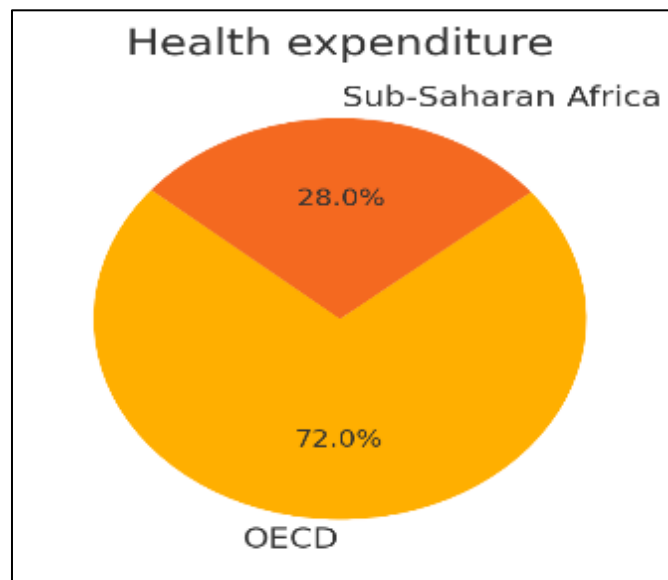
#### 4.1.2. Nutrition & vaccination



**Figure 3** Nutrition & Vaccination

OECD countries report very low malnutrition and near-universal vaccination coverage. In Sub-Saharan Africa, undernutrition and incomplete immunization still pose serious public health challenges. Enhanced nutrition programs and expanded vaccination campaigns are essential to bridge this gap.

#### 4.1.3. Health expenditure



**Figure 4** Health Expenditure

OECD countries allocate a much larger share of GDP to healthcare compared to Sub-Saharan Africa. Higher investment allows for better medical infrastructure, technology, and preventive programs. Increasing health expenditure in poorer regions is crucial for sustainable improvement in population well-being.

#### 4.2. Analysis

Analysis of health indicators shows that economic development is inextricably linked to the health of populations. Rich countries benefit from developed health, education, and social welfare systems, while poor countries remain trapped in a cycle of poverty, disease, and limited productivity.

Reducing global health inequalities requires a combination of policies: investment in infrastructure, universal access to basic services, education, and improved social conditions. Health, ultimately, is not just an indicator of development—it is a prerequisite for it.

Comparisons show that rich countries consistently have higher health indicators, the result of investments in prevention, education, and social welfare systems. In contrast, in poor countries, lack of infrastructure, poverty, and political instability limit the population's access to basic services.

Poor access to clean water and inadequate medical coverage lead to high rates of child and maternal mortality. At the same time, malnutrition and infectious diseases continue to be the main causes of death, in contrast to developed countries, where chronic diseases related to modern lifestyles predominate.

Furthermore, the difference in health expenditure is striking: rich countries spend up to three times their GDP on health, while in poor countries spending remains limited and often depends on international aid programs.

#### 4.3. Research conclusions

The study of health indicators reveals that health is closely linked to social justice and economic equality. Poor countries face a vicious circle: poverty leads to poor health, and poor health perpetuates poverty.

Reducing inequalities requires coordinated policy interventions: strengthening universal access to health, investing in education and public health, and addressing the social roots of poverty. Only by linking economic growth to social equality can sustainable improvements in global health be achieved.

## 5. Conclusions

Health is a fundamental dimension of human development and a key determinant of economic progress. The difference in health indicators between rich and poor countries reflects not only economic inequalities, but also limited access to education, social participation, and basic services. Improving health enhances productivity, human capital efficiency, and attracts investment, contributing directly to economic growth. Historical experience shows that improvements in public health and nutrition were a prerequisite for the Industrial Revolution and modern prosperity. At the same time, mental health and cultural participation strengthen social cohesion and the sense of well-being. Investments in health infrastructure, prevention, and education help to address inequalities and create more equitable societies. Access to universal healthcare is a central element of a sustainable health policy. Reducing spatial and social inequalities ensures equitable development and social stability. Integrating cultural activities into public health policy can improve mental well-being and promote sustainable development. Overall, health acts as both a means and an end to development, directly linking social well-being to economic progress. Ensuring high-quality public health is a strategic tool for governments, while public-private partnerships can enhance policy effectiveness. Finally, continuous monitoring of health indicators and policy evaluation help maintain a balance between social justice and economic development

## Compliance with ethical standards

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The Authors proclaim no conflict of interest.

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