



Macroeconomic importance of health in support of more money for health

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Background

Like many other low- and middle-income countries, Kenya faces health challenges that impede socio-economic progress. From infectious diseases such as malaria and HIV/AIDS to non-communicable ailments like cardiovascular diseases and diabetes, the burden of disease in Kenya is multifaceted and intertwined with broader socio-economic dynamics. The health sector remains a critical component of the economy in ensuring a population's overall health and well-being, which drives the economic growth agenda. Economic shocks like the COVID-19 pandemic, Russia-Ukraine war, and climate change have caused severe impacts on both the environment and health.

In 2023, Kenya's inflation rate remained above 7.5% due to supply chain disruptions, high fuel prices, and adverse weather conditions [1]. This was 1.1 percentage points higher than the pre-COVID-19 inflation rates between 2013 and 2018, which was low and stable, averaging 6.4%, while the inflation declined to 4.7% in January 2019 from 5.7% in December 2018 [2], [3]. In addition, the projection of growth in emerging markets and developing economies, including Kenya, anticipated a slowdown from 6.5% in 2021 to 4.8% in 2022 due to the strict zero-COVID strategy in China, leading to recurrent mobility restrictions and deteriorating prospects for the employment sectors [4]. The health budget expenditure fell 4th from 3rd place in 2021/2022 across the sectors with Kshs 122.5 bn in the 2022/23 financial year in comparison to education (Kshs 544.4 bn), energy, infrastructure & ICT (Kshs 416.4 bn) [5], [6].



Photo: UNFPA Kenya

Like most African governments, Kenya still falls below the set annual health budget target of 15% by the Abuja Declaration of 2001 [7]. The total health spending in fiscal year (FY) 2015/16 accounted for 5.2% of gross domestic product (GDP) [8]. Notably, the total health expenditure (THE) per capita drastically decreased from 6.8% in 2012/13 to 5.2% in 2015/16, while the government expenditure on health was 6.7% percent of total government expenditure [8]. In 2020, the current health expenditure (CHE) as a percent of GDP was 4.29% [9].

Recognising the intrinsic linkages between health and economic development, this review aims to determine how health impacts macroeconomic indicators and justifies the health sector's essential contribution to economic growth. This reinforces the country's need to invest more money in healthcare.

Methods

The methodology employed in this literature review included a systematic search and analysis of peer-reviewed articles, global and national financial reports, and policy documents related to health economics and development in Kenya. Electronic databases such as PubMed, Google Scholar, and ResearchGate were searched using keywords including "health," "macroeconomics," "Kenya," "economic growth,"

"productivity," and "human capital." Relevant articles published between 2000 and 2022 were included in the review, focusing on empirical studies, theoretical frameworks, and policy analyses. The literature was critically evaluated to identify key themes, findings, and gaps in knowledge on the macroeconomic importance of health in Kenya.

Findings

Health impact on the GDP

Health has significant impacts on the per capita gross domestic product (GDP). For instance, a study conducted on the effects of maternal mortality on GDP by the World Health Organization (WHO) in the African region reported that maternal mortality has a significant adverse impact on the GDP, where the maternal mortality of a single person reduces the per capita GDP by US\$ 0.36 per year [10]. In 2019, the morbidities and mortalities from non-communicable diseases brought about a loss in the economic outputs in Ethiopia (1.16% of GDP), Ghana (0.95% of GDP), and Rwanda (1.19% of GDP) [11]. Furthermore, the East African Community (EAC)

lost US\$ 1,811 per disability-adjusted life-year (DALY) due to neglected tropical diseases (NTDs) [12]. Like all other countries, Kenya experienced the devastating impacts of COVID-19 in December 2019 and is still recovering from this as of 2023 [13], [14], [15]. Nonetheless, the pandemic had a surge between 2020 and 2022 to about 5,600 deaths and 320,00 reported cases [16]. The COVID-19 lockdowns and movement restrictions reduced global trade volume by 10.3% in 2020 compared to 1% in 2019 [17]. In addition, Kenya’s central bank rate (CBR) was reviewed downwards from 8.5% in 2019 to 7% by the end of 2020. In reviewing the GDP growth rate between 2018 and 2022 (see Figure 1), there was a structural break in the GDP growth rate from 4.9% in 2019 to -0.3% in 2020 [18].

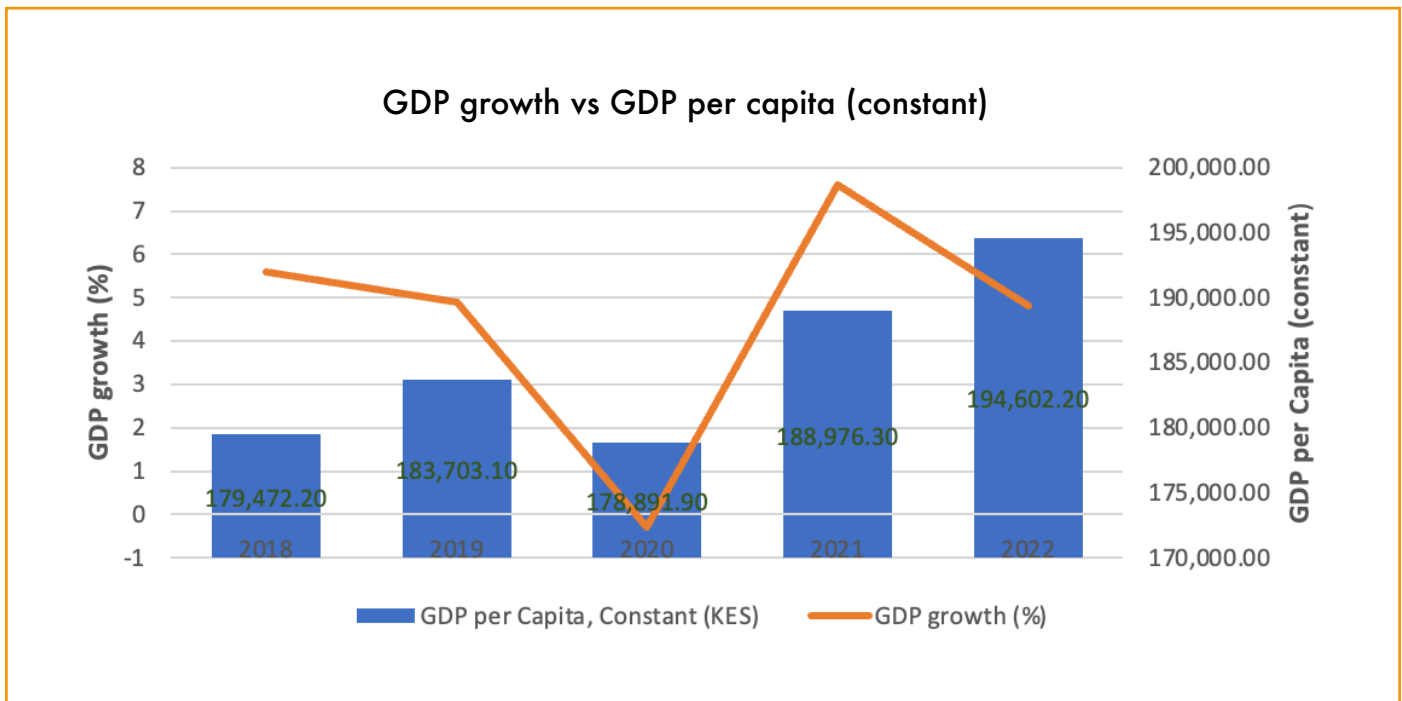


Figure 1. Comparison of GDP growth and GDP per capita between 2018 and 2022. Source: Kenya Economic Survey, 2023 [18]

Health investment’s impact on the economy

Investing more in primary healthcare by developing health systems and capacities at districts and primary hospitals and promoting preventive health, such as for HIV/AIDS and malaria, ultimately reduces costs and ensures fiscal sustainability [19]. Notably, health investments lead to improved health outcomes. For instance, evidence points out cost-effectiveness ratios of less than GDP per capita for various healthcare interventions, leading to improved health outcomes.

Healthcare prevention strategies such as HPV vaccination and cervical cancer screening reduce lifetime cancer risks by 43% to 50% in Kenya [20], [21]. Moreover, Hib vaccination in Kenya was expected to cost \$38 per DALY avoided. In contrast, hepatitis B vaccination in The Gambia was estimated to cost \$28 [22], [23] while the rotavirus vaccination in Kenya averts about 55% of deaths, 65% of reduced hospitalisations and would save 58 DALYs per 1000 children annually [24].

Sectors productivity impact on the economy

Expanding the health sector in preventive health for malaria reduces malaria incidences and deaths. Consequently, this increases labour and capital, enhancing GDP [25]. On the other hand, higher morbidity lowers productivity through increased time off from work or poor performance, thereby affecting national production or GDP [19]. The effects of population and labour supply have macroeconomic impacts. For instance, worker productivity reduces per capita incomes [19]. Health effects on skilled workers also influence the tax rates and aggregate savings that determine fiscal growth and impacts [19].

Agriculture is the primary source of income and employment for 62% of the African region population residing in rural areas, contributing to 14.7% of the GDP in sub-Saharan Africa [26], [27]. However, mortalities and morbidities from tuberculosis-related diseases impact the macroeconomic output. These include increased healthcare costs, decreased labour and productivity, and decreased investments in creating human and physical capital [26]. For instance, TB deaths from low-middle-income countries, including Kenya, contributed to non-health GDP loss by 46.7%. In addition, among the 47 WHO African countries, the non-health GDP loss is approximately 1.37% of the collective GDP [26].

Unemployment and emigration impact on the economy

Unemployment reduces labour supply, ultimately impacting the labour market and economic growth [19]. Disease outbreaks lead to substantial job losses that significantly reduce total GDP [28]. Notably, there is a considerable loss of investments from human capital costs, such as doctors migrating from sub-Saharan countries in search of better income prospects [29]. Consequently, the average investment loss per doctor in Kenya is US\$ 50,748 [29]. The emigration is mainly attributed to low health budget prioritisation and allocation, and the

relative burden on health systems [5]. For example, the ratio of doctors per population in Kenya is 1:10,000 against the WHO recommended ratio of 1:1000 [30], [31].

The COVID-19 pandemic reduced Kenya’s total employment to 17.4 million in 2020, down from 18.1 million in 2019. In addition, the wage employment in the private sector declined by 10% in 2020, similar to the GDP growth decline at -0.3% [17], [18]. (See Figure 2)

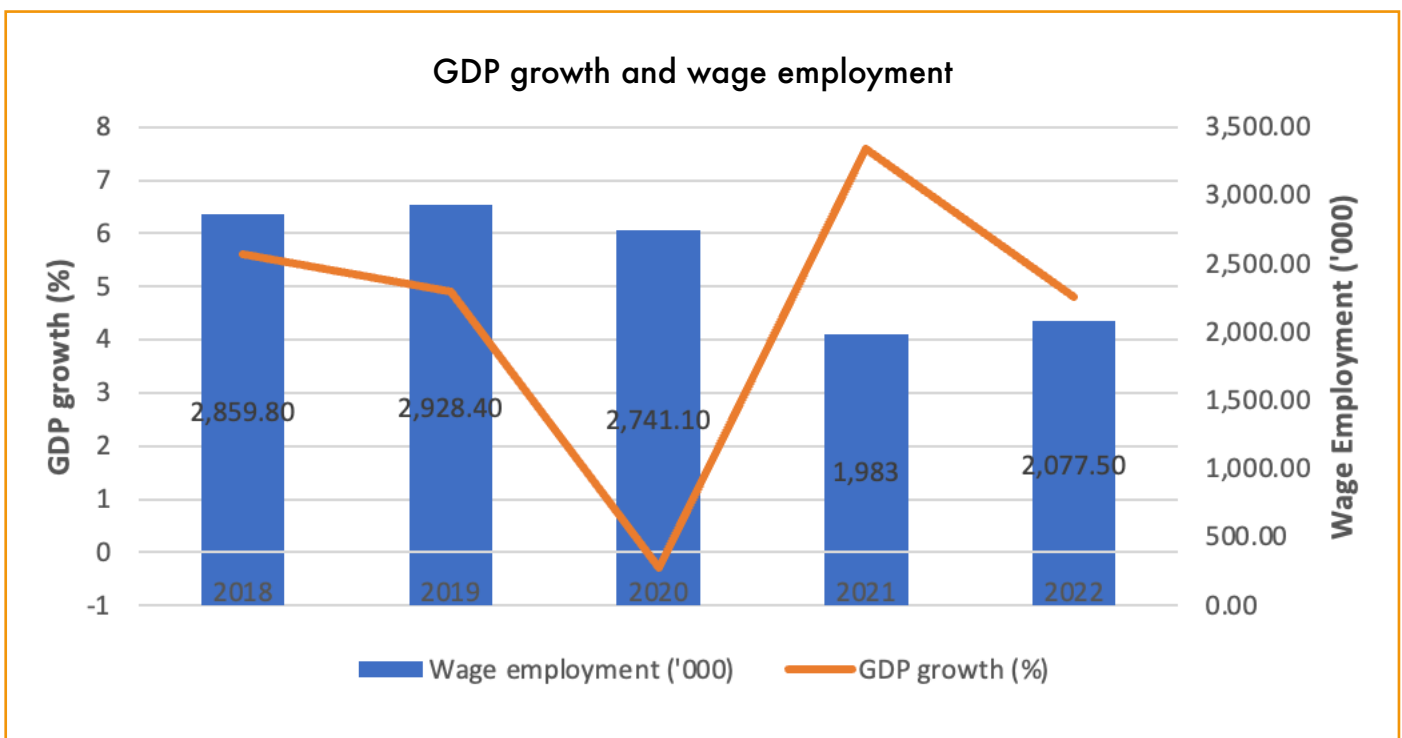


Figure 2. Comparison of GDP growth and GDP per capita between 2018 and 2022. Source: Kenya Economic Survey, 2023 [18]

Discussion

This review explores the macroeconomic implications of health and argues for an augmented allocation of resources towards healthcare. The discussion emphasises the multifaceted impact of health on economic productivity, fiscal sustainability, and overall societal well-being. This necessitates an urgent need to ensure careful fiscal prioritisation and discipline. In addition, the review highlights the dependence on a healthy and productive workforce as a means to a robust economy. This finding is similar to other studies that confirm healthier individuals contribute to increased labour force participation, reduced absenteeism, and heightened overall productivity [32].

Further, the review explores the financial effects of health spending and shows how funding healthcare can help maintain fiscal stability over the long run. It investigates the economic viability of health initiatives and the possible cost savings linked to early detection and illness prevention, a key finding cited in multiple studies [33], [34]. A macroeconomics and health commission report emphasised the need for more significant financial investments in targeted health sector interventions and an appropriately designed health delivery system that can reach the impoverished, which is necessary for increased health coverage for the poor [35].

Conclusion

The macroeconomic importance of health in Kenya underscores the need for targeted interventions to improve population health and foster inclusive growth. Strengthening primary healthcare systems, expanding access to essential health services, and addressing socio-economic determinants of health are paramount for achieving sustainable development objectives. Concerted efforts to enhance health outcomes in Kenya require multi-sectoral collaborations, innovative financing mechanisms, and evidence-based

policy interventions. By prioritising investments in health and human capital, Kenya can unlock its full economic potential and improve the well-being of its citizens in the long run. This review makes a compelling case for increased investment in healthcare as a strategic imperative for sustained economic growth. It shows the many advantages of investing in health. It pushes for policy changes to consider the macroeconomic criticality of health when allocating resources by combining information from many sectors.

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