

Sustainable development in health in Latin America: Case of Mexico

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Abstract

Health is essential for achieving the three dimensions of sustainable development: inclusive social development, economic development, and environmental sustainability. The migration phenomenon, violence, and food emergencies during migratory journeys, non-communicable health problems such as essential hypertension, lipoprotein disorders, diabetes mellitus, and hypothyroidism, among others, pose additional challenges to health systems. The combination of the COVID-19 pandemic and various concurrent crises creates an unprecedented and alarming situation that threatens the achievement of the Sustainable Development Goals (SDGs) outlined in the 2030 Agenda for Sustainable Development in Latin American countries. Several key health indicators, including those related to nutrition, mental health, and maternal mortality, among others, have shown significant declines. This paper examines recent trends in health spending in Latin America and analyzes some of the intercurrent factors that influence the coverage and adequacy of health services.

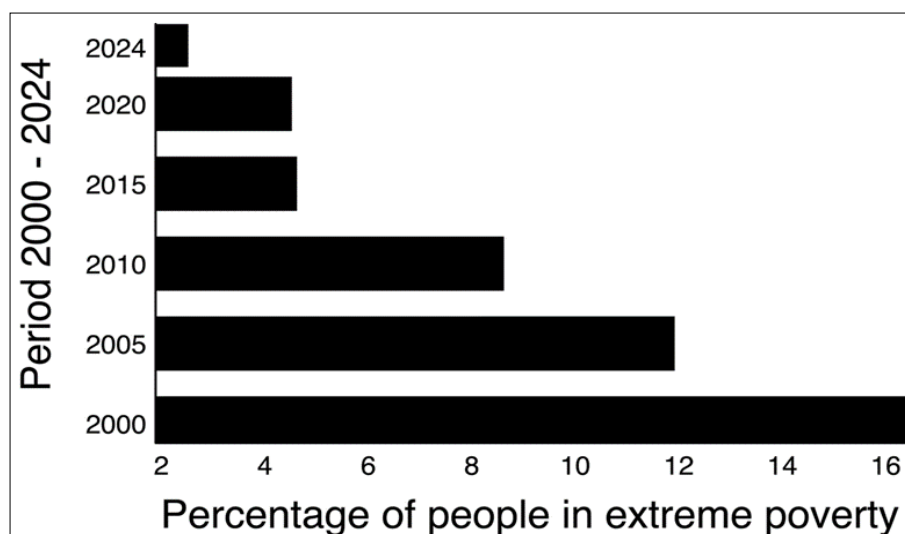
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Introduction

In September 2023, the SDG Summit was held in New York, USA, with the participation of heads of state and government ^[1]. The goal is to review progress toward achieving the Sustainable Development Goals (SDGs) and discuss the actions required to meet them. It reaffirmed the need for urgent, ambitious, and transformative efforts to achieve them by 2030. In the political declaration adopted by the General Assembly, “Member States recognized that the achievement of the SDGs is at risk and expressed their determination to make every effort to implement the 2030 Agenda” and achieve the Sustainable Development Goals by the target year of 2030” ^[2].

The 2024 Sustainable Development Goals Report showed a halt in progress toward achieving these goals by the proposed target date of 2030 ^[4]. The persistent impacts of

the COVID-19 epidemic, compounded by conflicts, climate shocks, and economic instability, are exacerbating existing inequalities. Twenty-three million people fell into extreme poverty, and more than 100 million suffered from hunger in 2022 compared to 2019. While some health targets improved, overall progress on global health has slowed alarmingly since 2015. The COVID-19 pandemic wiped out nearly 10 years of progress in life expectancy. Education, a pillar of sustainable development, remains severely threatened, with many countries experiencing declining math and reading skills among students, jeopardizing the core competencies that will determine future prosperity. The evolution of extreme poverty in México is shown in Figure 1 ^[5]. Extreme poverty is defined as living below the International Poverty Line of \$3 per day ^[5].



Source: ^[5]

Fig 1: Evolution of extreme poverty in Mexico

Generation of the Sustainable Development Goals (SDGs)

On September 25, 2015, world leaders adopted a set of 17 global goals aimed at eradicating poverty, protecting the planet, and ensuring prosperity for all, as part of a new Sustainable Development Agenda. Specific objectives were formulated for each goal that must be achieved by 2030 [6].

Goal 1—No Poverty. A fundamental objective of the 2030 Agenda is the elimination of extreme poverty in conjunction with sustainable development. Extreme poverty, defined as surviving on \$2.15 per person per day according to 2017 purchasing power parity, has experienced notable declines in recent decades. However, the COVID-19 pandemic radically halted these achievements. The number of people living in extreme poverty increased for the first time in a generation by nearly 90 million compared to previous predictions [4]. According to CONEVAL, the Mexican population living in extreme poverty, as defined by the Extreme Income Poverty Line, was 7.1% (37.7 million people) as of August 2024 [6]. If current trends continue, it is estimated that 7% of the world's population could be in extreme poverty by 2030. Two problems are contributing: rising food prices and a resurgence in hunger levels [4].

Goal 2 — Zero Hunger. This goal of creating a world free of hunger by 2030 collides with an alarming increase in hunger since 2015, due to factors including climate change, deepening inequalities, the pandemic, and various conflicts. In 2022, approximately 735 million people (or 9.2% of the world's population) will face this situation [4]. In Mexico, inadequate nutrition among the extremely poor was the fourth most prevalent deficiency [6].

Goal 3—Good Health and Well-being. Inequalities in access to health care persist. Despite progress in improving people's health, for example, around three-quarters of countries or regions have already met the SDG target for under-5 mortality. COVID-19 and other intercurrent crises are hindering progress towards Goal 3. Childhood vaccination has experienced the most significant decline in three decades, and deaths from tuberculosis and malaria have increased compared to pre-pandemic levels [4]. In Mexico, lack of access to health services was the second most common deficiency among the population living in extreme poverty, with an incidence of 81.7% in 2022. This deficiency was also the only one that showed an increase between 2018 and 2022, rising from 25.6% to 81.7%, indicating greater difficulty in accessing health services. This increase occurred in a context of changes in the healthcare system, which could have contributed to the situation [6].

Goal 4—Quality Education. The COVID-19 pandemic has had devastating impacts on education, resulting in learning losses in approximately 80% of the countries analyzed. Quality education is considered one of the pillars that would enable the achievement of various SDGs. Quality education is considered essential to breaking the cycle of poverty and gender inequality [3]. In Mexico, approximately 90% of people living in extreme poverty did not complete upper secondary education or a higher academic level [6].

Goal 5—Gender Equality. Gender equality is one of the essential foundations for building a peaceful, prosperous, and sustainable world. Despite some progress, the world is far from achieving gender equality by 2030. Analyzing gender equality practices in the workplace in developed and

developing countries reveals notable differences. Significant challenges persist, such as the underrepresentation of women in leadership positions and the continued practice of gender discrimination [7]. On average, women earn 23% less than men in the global labor market and spend three times as many hours on unpaid domestic and care work as men. Among the significant obstacles to achieving gender equality are sexual exploitation, unequal distribution of domestic work, violence, and discrimination in public office [4]. Violence, sexual exploitation, the unequal distribution of unpaid domestic and care work, and discrimination in public office continue to be significant obstacles. It is estimated that it will take nearly 50 years to achieve equal representation in national parliaments and approximately 300 years to end child marriage [4].

Goal 6—Clean water and sanitation are one of the most basic human needs for health and well-being. The water demand has outpaced population growth, and half of the world's population currently experiences severe water scarcity for at least one month per year. Water scarcity is expected to increase with rising global temperatures, driven by climate change. However, between 2015 and 2022, the proportion of the world's population with access to safely managed drinking water services increased from 69% to 73% [4]. In Mexico, approximately one-third of the rural population living in extreme poverty lacked access to water (27.4%) and sewage disposal (33.8%) in their homes [6].

Goal 7—Affordable and Clean Energy. Energy consumption remains the leading cause of climate change, accounting for approximately 60% of global greenhouse gas emissions [8, 9]. This goal aims to ensure access to clean and affordable energy, which is crucial for the development of agriculture, businesses, communications, education, healthcare, and transportation. It is estimated that by 2030, nearly 2 billion people will continue to cook using polluting combustion processes, and more than 500 million people will still lack access to electricity [4]. In Mexico, despite the enactment of legislation promoting the use of clean energy, the lack of comprehensive regulations and insufficient competition could hinder the sector's growth in the short and medium term. Furthermore, the lack of transparency in the allocation of strategic projects presents an additional challenge [10].

Goal 8—Decent Work and Economic Growth. Despite an increase in labor productivity and a decline in the global unemployment rate, real growth in global GDP per capita is expected to slow in 2023. Several crises pose significant threats to the global economy. However, further progress is needed to improve employment opportunities, especially among young people, reduce informal employment and labor market inequality (particularly the gender pay gap), promote safe and secure work environments, and enhance access to financial services. Data suggest that jobs in primary and low-skilled sectors are concentrated among workers in extreme poverty [4].

Goal 9—Industry, Innovation, and Infrastructure. One of the key drivers of global economic growth is the manufacturing industry, which is experiencing a steady decline due to various factors, including trade conflicts and tariffs. These problems were exacerbated by the COVID-19 pandemic [4].

Goal 10—Reduced Inequalities. Inequality threatens long-term social and economic development, hinders poverty reduction, and destroys people's sense of fulfillment and self-worth. In most countries, the incomes of the poorest

population increased faster than the national average in most parts of the world. However, recent data suggest that COVID-19 may have damaged this positive trend of reducing inequality within countries [4].

Goal 11—Sustainable Cities and Communities. Urban concentration is inevitably the future of the global way of life. More than half of the world's population lives in urban areas, and it is projected that by 2050, 70% of the population will live in cities. The number of people living in slums is expected to double in the next 30 years [4].

Goal 12—Responsible Consumption and Production. It is estimated that by the time the world's population reaches 9.8 billion, the planet's natural resources will unlikely be able to sustain current lifestyles. This goal aims to ensure sustainable consumption and production patterns, which are essential to sustain the livelihoods of current and future generations. Our planet is running out of resources, yet the population continues to grow. If the global population reaches 9.8 billion people by 2050, all these individuals would require the equivalent of nearly three planets' worth of natural resources to maintain their current lifestyles. Emphasis must be placed on replacing energy supply systems with more sustainable ones and avoiding food waste [4].

Goal 13—Climate Action. Climate change, primarily driven by human activities, poses a significant threat to the course of life on Earth as we know it. Climate change, in addition to rising sea levels, is giving rise to unprecedented and unpredictable meteorological phenomena. This phenomenon generates widespread migratory movements, causing migration instability and violence [4].

Goal 14—Life Below Water. Human existence and life on Earth depend on the balance of the oceans and seas, which provide key natural resources such as food, medicines, biofuels, and other products. Plastic, a highly harmful type of marine debris, is a stark indication that marine pollution is reaching unprecedented levels. The reduction in ocean pH represents a growing threat to the survival of marine [4].

Goal 15—Life on Land. Desertification, land degradation, and biodiversity loss represent significant damage and increasing threats to terrestrial ecosystems, which are essential for sustaining human life [4].

Goal 16—Peace, Justice, and Strong Institutions. Achieving this goal is significantly hindered by the erosion of the rule of law in many countries, the high level of illicit arms trafficking, a weak fight against corruption, and a lack of inclusive participation [4].

Goal 17—Partnerships to achieve the goals. The SDGs face growing obstacles: global partnerships emphasize industrial protection processes and increased "defense" spending; low- and middle-income countries face enormous debts that prevent them from making progress in this area. The increase in 2022 is primarily attributed to spending on refugees in donor countries and humanitarian and military aid to Ukraine [4].

Sustainable Health Development in Latin America and SDG Goal 3—Health and Well-being

Good health and well-being. Good health refers to the state of being physically and mentally free from disease and illness. Well-being, on the other hand, is a broader and more holistic concept that encompasses not only physical and mental health, but also emotional, social, and spiritual well-being, as well as overall quality of life [11]. The COVID-19

pandemic had a severe impact on global health [12], reversing nearly a decade of progress in life expectancy. While most health-related indicators are moving in the right direction globally, current trends are insufficient to meet the 2030 goals.

In recent years, significant progress has been made in improving people's health. Three-quarters of countries or regions have already met or are on track to meet the SDG target on under-5 mortality. However, the maternal mortality ratio remains virtually stagnant at a level three times higher than the proposed 2030 target. Deaths among children under 5 reached a historic low in 2022, but progress has slowed. Without accelerated decline, 35 million children will not reach their fifth birthday by 2030 [4].

The global response to infectious diseases has saved millions of lives and paved the way for healthier communities. Effective HIV treatment has reduced AIDS-related deaths by 52% globally since 2010, and at least one neglected tropical disease has been eliminated in 47 countries. However, inequalities in access to health care persist. The COVID-19 pandemic and other ongoing crises have hampered progress toward Goal 3. Childhood vaccinations have experienced the most significant decline in three decades, and deaths from tuberculosis and malaria have increased compared to pre-pandemic levels [4].

However, inequalities and emerging threats jeopardize these achievements, underscoring the need for sustained efforts and innovative strategies to address them. It is estimated that more than 50% of the world's population lacks access to the most basic health services, and the essential needs of an aging population remain unmet. Ensuring universal health coverage without financial hardship is crucial for healthy lives and the well-being of all.

The SDGs make a firm commitment to ending the epidemics of AIDS, tuberculosis, malaria, and other communicable diseases by 2030. The goal is to achieve universal health coverage and provide access to safe and affordable medicines and vaccines for all.

Health Systems

To overcome these setbacks and address persistent gaps in health care, greater investment in health systems is needed to support countries in their recovery and strengthen their resilience to future health threats. In many countries, health systems are weak or insufficient, and as a result, they cannot provide fair financing to prevent families from incurring excessive costs to meet their health needs [13]. Vulnerable groups of people living in regions with a high prevalence of diseases should receive special protection. In this way, we can strengthen health systems and foster resilience to health adversities. The decline in vaccinations, which is a highly cost-effective immunization process, means that millions of children are now at risk of contracting serious diseases that are largely preventable.

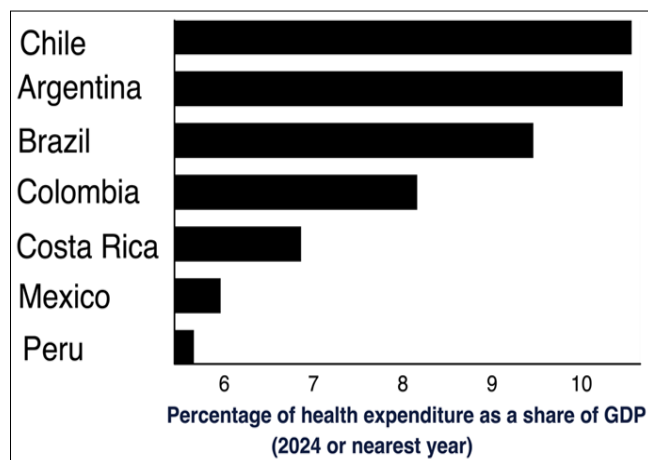
Universal health coverage (UHC) aims to ensure that all people have access to quality healthcare services, but inequalities persist as a key challenge in achieving UHC. Coverage of reproductive, maternal, child, and adolescent health services tends to be higher among individuals with higher educational levels and greater purchasing power, as well as those residing in urban areas, particularly in low-income countries.

Financing

The resources a country allocates to healthcare, relative to the size of the overall economy, vary over time due to

differences in both the growth of healthcare spending and overall economic growth. In Latin American countries with market economies, federal or state models, as well as combinations with cash transfers, are employed in accordance with each country's fiscal policies [14]. OECD countries generally experienced a higher increase in health spending than the rest of the economy during the 1990s and 2000s, which was associated with an almost continuous rise in the health spending-to-GDP ratio.

The arrival of the COVID-19 pandemic in 2020 led to a rapid increase in health spending, accompanied by a significant slowdown in economic activity and, consequently, a substantial adjustment in the health spending-to-GDP ratio. In 2019, prior to the pandemic, OECD countries spent an average of around 8.8% of their GDP on healthcare; due to the pandemic, this percentage increased by almost 2% on average. The United States of America (USA) is the country with the highest spending, accounting for over 16% of its GDP. After the USA, Germany is the next highest-spending country, with 12.7% [15]. Seventeen OECD countries spend more than 10% of their GDP on healthcare, with the notable exceptions being the United States, Germany, Canada, France, and Japan. In contrast, Mexico, Luxembourg, and Turkey spend less than 6% of their GDP on healthcare [15]. Mexico has a target of spending 5.72% of its GDP on public health expenditure for 2022 [16]. The health expenditure as a share of gross domestic product (GDP) for representative Latin American countries is shown in Figure 2.



Source: [17]

Fig 2: Health expenditure as a share of gross domestic product (GDP) for representative Latinoamerican countries

The COVID-19 pandemic reversed gains in life expectancy and progress in combating communicable diseases. The COVID-19 pandemic has significantly impacted global health, reversing the steady progress in life expectancy of the past two decades. Before the pandemic, global life expectancy had increased steadily, from 66.8 years in 2000 to 73.1 years in 2019, reflecting years of improvements in health and related areas. The COVID-19 pandemic reversed this positive trend, and global life expectancy fell to 71.4 years in 2021, returning to the level observed in 2012. Before the pandemic, non-communicable diseases had steadily increased as the leading cause of death, accounting for 59.5% of all deaths in 2000 and 73.9% in 2019. The share of communicable diseases decreased from 32.2% in 2000 to 18.2% in 2019 [15]. As COVID-19 emerged as a new

infectious disease and began to claim human lives, the share of deaths from communicable diseases soared to the 2005 level (28.1%) in 2021, while the share of deaths from non-communicable diseases decreased to 65.3%. COVID-19 was among the three leading causes of death worldwide in 2020 and 2021, with notable regional variations [15].

Conclusion

The world is not on track to achieve SDG Goal 3 related to Good Health and Well-being. Changing course requires emphasizing the achievement of universal health coverage, strengthening health systems, investing in disease prevention and treatment, and addressing disparities in access to care and services, especially for vulnerable populations.

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