# ADVANCEMENTS IN ACHIEVING HEALTH-RELATED SUSTAINABLE DEVELOPMENT GOALS OF BOTH PUBLIC AND PRIVATE SECTOR: A GLOBAL PURSUIT FOR A HEALTHIER TOMORROW

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## ABSTRACT

*The Indian healthcare industry includes hospitals, medical devices, clinical trials, outsourcing, telemedicine, medical tourism, health insurance, and medical equipment. The government provides limited facilities in rural areas, while the private sector provides most institutions. The sector grows by 22% between 2016 and 2022, reaching USD 372 billion in 2022. Public expenditure on healthcare is expected to increase, with the medical tourism market expected to reach USD 13.42 billion by 2026.India's public healthcare system focuses on rural areas and private sector-run facilities. With a low number of beds, pharmacists, and physicians, India has significant healthcare opportunities. However, future demand is expected to increase due to rising income, health awareness, and preventative healthcare. A comprehensive strategy is needed, involving public, private, and individual sectors. In 2023, India should consolidate and expand its approach to social determinants of health. This study basically tries to make a comparison on public and private sector industrial basin where the provision of it results in a sustainable development approach. The study postulates that the private sector health provisions are much more provisional than public sector industrial units.*

**KEYWORDS**: *Sustainable Development Goals, Zero Hunger, Gross Domestic Product, Public Expenditure, Private Expenditure.*

## INTRODUCTION

The United Nations' Sustainable Development Goals (SDGs) outline an ambitious agenda to address global challenges and improve the well-being of people and the planet by 2030. Sustainable development is a holistic approach to growth that seeks to meet the needs of the present without compromising the ability of future generations to meet their own needs. In the face of environmental challenges, social inequalities, and economic disparities, the concept of sustainable development has emerged as a guiding principle for creating a more equitable and resilient world. Among these goals, health-related SDGs play a crucial role in ensuring a healthier future for all. As we approach the midway point of the 21st century's second decade, it is essential to assess the progress made in achieving these health-related objectives and identify areas for continued effort. The basic principles of sustainable development include;

- Environmental Sustainability: One of the key pillars of sustainable development is environmental sustainability. This involves responsible resource management, conservation of biodiversity, and mitigating the impact of human activities on the planet. Transitioning to renewable energy sources, reducing carbon emissions, and adopting eco-friendly practices are critical steps toward achieving environmental sustainability. Governments, businesses, and individuals all play vital roles in fostering a balance between human development and environmental preservation.
- Social Equity: Sustainable development also emphasizes social equity and inclusivity. It aims to address issues such as poverty, hunger, and access to education and healthcare. Promoting social justice and equality helps build strong, resilient communities. Initiatives that empower marginalized groups, ensure gender equality, and provide equal opportunities for all contribute to a more sustainable and just society.
- Economic Prosperity: Economic sustainability is another crucial aspect of sustainable development. It involves fostering economic growth that benefits all members of society while minimizing negative impacts on the environment. Sustainable business practices, fair labor practices, and responsible consumption contribute to a more balanced and inclusive economy. By encouraging innovation and entrepreneurship, societies can create jobs and stimulate economic growth without depleting natural resources.
- Global Collaboration: Addressing global challenges requires international cooperation. Sustainable development encourages collaboration between countries, organizations, and individuals to share knowledge, resources, and technologies. Global agreements, such as the United Nations' Sustainable Development Goals (SDGs), provide a framework for collective action. By working together, the international community can tackle issues like climate change, poverty, and inequality more effectively. Education and Awareness: Building a sustainable future also requires widespread education and awareness. Individuals need to understand the impact of their choices on the environment and society. Educational institutions, governments, and non-profit organizations play crucial roles in raising awareness and promoting sustainable practices. Through education, people can make informed decisions that contribute to positive change.

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, is a blueprint for peace and prosperity for people and the planet. It focuses on the 17 Sustainable Development Goals (SDGs), which aim to end poverty, improve health and education, reduce inequality, spur economic growth, tackle climate change, and preserve oceans and forests. The SDGs build on decades of work by countries and the UN, including the UN Department of Economic and Social Affairs. The Earth Summit in 1992, the Millennium Declaration in 2000, and the Johannesburg Declaration on Sustainable Development in 2002 all contributed to the development of the SDGs. The Rio+20 outcome document in 2012 reaffirmed the global community's commitments to poverty eradication and the environment. The annual High-level Political Forum on Sustainable Development serves as the central UN platform for the follow-up and review of the SDGs. The Division for Sustainable Development Goals (DSDG) in the UN Department of Economic and Social Affairs provides support and capacity-building for the SDGs and related thematic issues.

There are different broad categories related with the sustainable development mechanism and it includes



**Source:** UN

## OBJECTIVES
1. To understand about the indicators of the sustainable development goals
2. To study in detail the health care sector in India and Kerala
3. To make a comparative study on private and public health care system in Kerala
4. To formulate suitable measures for the development of health care sector aiming for sustainable development in Kerala

## INIDICATORS OF SUSTAINABLE DEVELOPMENT GOALS

Sustainable Development Goals (SDGs) represent a universal call to action, urging nations, communities, and individuals to work collectively towards a more sustainable and equitable future. Adopted by all United Nations Member States in 2015, the 17 SDGs encompass a broad spectrum of interconnected objectives, addressing social, economic, and environmental challenges. As we navigate the complexities of the 21st century, the pursuit of these goals becomes imperative for fostering a world where prosperity is shared, and the planet thrives.

- No Poverty (SDG 1): Eradicating poverty is at the core of sustainable development. By promoting inclusive economic growth, social protection, and equal access to resources, societies can uplift the most vulnerable and build a foundation for sustainable progress.
- Zero Hunger (SDG 2): Ensuring food security is a fundamental aspect of sustainable development. Combating hunger requires not only increased agricultural productivity but also sustainable farming practices, resilient food systems, and reduced food waste.
- Good Health and Well-being (SDG 3): Healthy lives are essential for overall well-being. Achieving this goal involves improving healthcare infrastructure, promoting preventive measures, and addressing issues such as infectious diseases and mental health.
- Quality Education (SDG 4): Education is a key driver of sustainable development. Access to quality education empowers individuals, reduces inequalities, and fosters innovation. Education lays the groundwork for achieving multiple SDGs.
- Gender Equality (SDG 5): Gender equality is not only a human right but also a catalyst for sustainable development. Empowering women and ensuring equal opportunities contribute to economic growth, social cohesion, and overall progress.
- Clean Water and Sanitation (SDG 6): Access to clean water and sanitation is crucial for public health and environmental sustainability. Sustainable water management, pollution prevention, and equitable water distribution are essential components.
- Affordable and Clean Energy (SDG 7): Transitioning to sustainable and renewable energy sources is paramount for mitigating climate change and ensuring energy access for all. Balancing economic growth with environmental responsibility is key.
- Decent Work and Economic Growth (SDG 8): Sustainable economic growth must go hand in hand with job creation and decent working conditions. Promoting entrepreneurship, innovation, and social protection fosters resilient economies.
- Industry, Innovation, and Infrastructure (SDG 9): Innovation drives progress. Sustainable infrastructure, technological advancements, and responsible industrialization are essential for addressing societal needs without compromising the environment.
- Reduced Inequality (SDG 10): Building inclusive societies involves addressing inequalities within and among countries. Policies that promote social, economic, and political inclusivity contribute to stable and sustainable communities.
- Sustainable Cities and Communities (SDG 11): Urbanization is a global trend, and creating sustainable cities requires smart planning, efficient resource use, and resilient infrastructure. Sustainable urban development contributes to improved living standards.

- Responsible Consumption and Production (SDG 12): Ensuring sustainable consumption patterns and responsible production processes minimize environmental impact. Reducing waste, promoting recycling, and adopting eco-friendly practices are critical elements.
- Climate Action (SDG 13): Climate change poses a significant threat to sustainable development. Mitigating its impact and adapting to changes require global cooperation, sustainable energy solutions, and conservation efforts.
- Life Below Water (SDG 14) and 15. Life on Land (SDG 15): Preserving marine life and terrestrial ecosystems are vital for biodiversity and environmental balance. Sustainable management of oceans, forests, and ecosystems contributes to the well-being of the planet.
- Peace, Justice, and Strong Institutions (SDG 16): Sustainable development relies on stable societies, effective governance, and the rule of law. Promoting justice, reducing violence, and ensuring accountable institutions are essential for progress. Partnerships for the Goals (SDG 17): Achieving the SDGs requires collaborative efforts from governments, businesses, civil society, and individuals. Building strong partnerships fosters collective action and ensures that no one is left behind.

## SUSTAINABLE DEVELOPMENT AND THE HEALTH SECTOR

Sustainable development and health are intricately linked, as both concepts recognize the interconnectedness of environmental, social, and economic factors in shaping human well-being. Sustainable development refers to meeting the needs of the present without compromising the ability of future generations to meet their own needs. Health, on the other hand, is a state of complete physical, mental, and social well-being.
Here are some key ways in which sustainable development and health are connected:

- Environmental Health: Air and Water Quality: Sustainable development emphasizes responsible resource management and pollution control, which directly impacts the quality of air and water. Clean air and water contribute significantly to human health and well-being.
- Climate Change: Addressing climate change is a critical aspect of sustainable development. Climate change can lead to various health risks, such as the spread of infectious diseases, heat-related illnesses, and the disruption of food and water supplies.
- Social Equity and Justice: Access to Healthcare: Sustainable development aims for social equity and justice, ensuring that everyone has access to essential services, including healthcare. Improving healthcare accessibility is crucial for promoting overall community health.
- Education and Employment: Sustainable development involves investing in education and creating job opportunities, contributing to improved socioeconomic conditions. Education and employment are key determinants of health, influencing factors such as income, lifestyle, and access to healthcare.

- Economic Development: Poverty Alleviation: Sustainable development seeks to reduce poverty through economic growth that benefits all members of society. Poverty is a major determinant of health, affecting nutrition, housing, and access to healthcare.
- Inclusive Economic Growth: A sustainable economy promotes inclusive growth, reducing disparities in income and wealth. Inclusive economic policies contribute to better health outcomes for a broader segment of the population.
- Biodiversity and Ecosystem Health: Food Security: Sustainable agricultural practices that prioritize biodiversity contribute to food security. Diverse and resilient ecosystems provide a variety of nutritious foods, supporting human health.
- Ecosystem Services: Healthy ecosystems provide essential services such as clean air, water purification, and disease regulation. These services directly impact human health and well-being.
- Global Health Cooperation: International Collaboration: Sustainable development often requires global cooperation to address transboundary health challenges. Issues like pandemics, emerging infectious diseases, and antimicrobial resistance require coordinated efforts on a global scale.

## GROWTH AND POTENTIALITY OF THE HEALTH SECTOR

India's hospital industry, accounting for 80% of the healthcare market, is experiencing significant investor demand. The country ranks 10th in the Medical Tourism Index for 2020-2021, with foreign tourists arriving for medical purposes increasing from 1.83 lakh in 2020 to 3.04 lakh in 2021. The diagnostics industry is valued at $4 billion, with a 25% organized sector. The healthcare sector is expected to grow at a CAGR of 22% between 2016-22, reaching $372 billion in 2022. Public expenditure on healthcare is expected to rise. India's healthcare sector has experienced significant growth due to factors such as population increase, life expectancy, affordable private healthcare, and government emphasis on improving healthcare. With a $40 billion value, Indian healthcare is now valued at over $40 billion, with 80% of spending in the private sector. Medical tourism has become a popular destination, with $2 billion in business. However, by 2030, India will become the most populated nation globally, with approximately 200 million people being at least 60-years-old.

India's healthcare expenditure is insufficient, accounting for only 4.1% of GDP, the lowest among the BRICS countries. The country faces several health economic challenges, including diabetes, hypertension, tuberculosis, and overpopulation. Diabetes is the most common form of disability-related death in India, with a high number of uncontrolled cases and poor nutrition leading to poor prognosis. Dialysis is expensive for both patients and the country's economy, with cataract and glaucoma requiring equal monetary help for treatment. Hypertension is the sixth most common form of disability-related death in India, with poor nutrition, low air quality, and awareness of risk factors like smoking contributing to its prevalence. Treatment is expensive, with generic medicine

provided to the poor and expensive interventions like stenting and anticoagulant and statin therapy. The government provides generic medicine but the prognosis is not always good, leading to increased demand from the government and a decline in the economy.

Tuberculosis (TB) is the most significant burden in India, costing $32 billion per year. Despite efforts to build vaccines and prevent TB, the cost of BCG vaccination surges due to the large population. Reporting all cases to the WHO creates pressure on the country to escape this lethal and highly contagious disease. Overpopulation also poses major concerns for India's economics. Feeding the population and managing its illnesses is not a piece of cake, and the country must address these issues to ensure its long-term success.

The health care trends and factors could however be summarised as below;
- Medical Tourism: In 2020, India's medical tourism market was estimated to be worth $5-6 billion, projected to grow to $13 billion by 2026. India is known for offering cost-effective and high-quality medical services, attracting international patients.
- Overall Healthcare Sector Growth: The healthcare sector in India is expected to reach $50 billion by 2025, indicating significant growth in the industry.
- Digital Healthcare Market: The digital healthcare market is projected to grow by more than 20% by 2023, reflecting the increasing adoption of digital technologies in healthcare services.
- Telemedicine Market: Telemedicine is identified as a high-potential eHealth segment, expected to reach $5.4 billion by 2025, showcasing the growing importance of remote healthcare services.
- Public Expenditure on Healthcare: India's public expenditure on healthcare stood at 2.1% of GDP in 2021-22, an increase from previous years. This reflects the government's commitment to invest in the health sector.
- National Digital Health Blueprint: The National Digital Health Blueprint aims to unlock incremental economic value of over $200 billion for the healthcare industry in India over the next 10 years, emphasizing the role of digital health initiatives.
- Ayushman Bharat - Health Insurance Scheme: India has the world's largest health insurance scheme, Ayushman Bharat, supported by the government. This initiative aims to provide financial protection to a large section of the population for their healthcare needs.
- Foreign Direct Investment (FDI): India allows 100% FDI under the automatic route for greenfield projects and permits up to 100% FDI in brownfield projects under the government route, encouraging foreign investments in the healthcare sector.
- Medical Tourism Promotion: The Indian government is actively promoting medical tourism by extending the e-medical visa facility to citizens of 156 countries, making it easier for international patients to seek medical treatment in India.

- Wearable Technology: India is emerging as a strong market for wearables, with a significant increase in sales. Approximately 2 million units were sold in 2017, and this number is expected to reach 129 million units by 2030.
- Surgical Robotics Market: The surgical robotics market in India is projected to expand significantly, reaching a size of $350 million by 2025, indicating the increasing adoption of advanced medical technologies.

The facts from the economic survey 2021-22 suggests that
- Healthcare Accessibility and Quality: India's ranking of 145th out of 180 nations in terms of healthcare accessibility and quality, according to the Global Burden of Disease Study 2016, suggests that there are significant challenges in ensuring widespread access to quality healthcare services in the country.
- Doctor-to-Population Ratio: The goal of achieving a doctor-to-population ratio of 1:1000 by 2030 reflects the need for a substantial increase in the number of healthcare professionals. The requirement of an additional 2 million doctors indicates the scale of the shortage and the need for efforts to expand medical education and healthcare workforce.
- Disease Burden: Despite having 17% of the world's population, India bears a disproportionately large portion (20%) of the global disease burden. This indicates a high prevalence of diseases, which could be attributed to various factors such as population density, environmental conditions, lifestyle factors, and healthcare infrastructure.
- Public Healthcare Spending: India's public healthcare spending increased from 1.8% of GDP in 2020–2021 to 2.1% in 2021–2022. While this represents a positive trend, it still falls short of the recommended spending levels for a country of India's size and population. Adequate funding is crucial for improving healthcare infrastructure, ensuring the availability of essential medicines, and addressing the healthcare workforce shortage.

## HEALTH CARE SETCOR IN KERALA-A SECONDARY ANALYSIS

Kerala has a rich history of organized health care, dating back to the indigenous systems of Ayurveda. Colonial powers introduced their medical system to the region, and in the 19th century, princely rulers in Travancore and Cochin made western care available. A royal proclamation in 1879 made vaccination compulsory for public servants, prisoners, and students. Public health authorities also took measures to control cholera during fairs and festivals. In 1928, parasite surveys were conducted in Travancore, leading to control measures against hookworm and filariasis. Health services expanded beyond preventive care, with general hospitals in Trivandrum and Cochin being 150 years old. Initiatives included providing safe drinking water, state-supported primary education, and establishing mission hospitals in remote areas. Kerala state was established in 1956, with a significant portion of government expenditure dedicated to health services. Social sectors, including education and health, accounted for a large share of development expenditure. From 1956 to the early 1980s, the government experienced significant growth and expansion of health services, with an annual compound growth rate of 13.04%. From 1961 to 1986,

the state expanded its government health facilities, with beds and institutions increasing significantly.

The fiscal crisis in Kerala from the mid-1970s to the early 1990s led to unprecedented growth in revenue deficits, which were higher than the All-States average in India. During this period, expenditure on health grew, with capital spending stagnating by the mid-1980s before rapidly declining, while revenue spending continued to grow into the 1990s. This was due to the salary component in revenue expenditure, which showed no sign of diminishing during most of this period.

Successive governments committed to growing expenditure on salaries due to increases in jobs created and pay, resorted to cutting back supplies when faced with growing fiscal difficulty. Spending on supplies showed a definite downturn by the latter half of the 1980s, affecting the secondary sector and primary sector. The quality of medical care in government hospitals must have been affected, as only 23% of households regularly utilized government health services.

The government has been aware of the increasing scarcity of funds in the health sector, but in practice, this rule is systematically breached. There is no mechanism to verify the self-declared income of patients, and even those who are willing to declare their true income and pay for services are discouraged due to administrative delays. Most people prefer to understate their incomes when seeking services in the public sector, resulting in very low cost-recovery in government hospitals, under 5%. The Resources Commission recommended enforcing the collection of user charges more actively, but successive governments have been unable to implement the suggestion fully due to politically motivated popular resistance.

### Development of private health care facility in Kerala
Private hospitals in Kerala have seen a nearly 40% growth in beds and employment of personnel compared to government facilities, with the number of beds in government institutions growing from around 36,000 to 38,000. Private hospitals have also outpaced government facilities in providing high-tech diagnostic and therapy methods, such as computerized tomography (CT) scans, endoscopy units, magnetic resonance imaging (MRI), neonatal care units, and coronary units.

The growth in the private sector can be attributed to rising disposable incomes and the lack of barriers to opening a private hospital. The absence of government legislation relating to hospital start-up, running, and profit generation was a feature shared with most Indian states, but the high demand for health care in Kerala probably provided the impetus for the growth in its private health sector.
The ageing population in Kerala during the same period also influenced the demand for health care, with life expectancy for men reaching 60.6 years and women at 62.6 years. The growing number of people with longstanding illnesses and the growth in disposable incomes meant that an ever-greater number of people were prepared to pay money for health care.

The pattern of distribution of facilities in the private and government sectors in health in Kerala provides insights into the dynamics of the growth. The average density of beds in the private sector is almost twice that in the government sector, indicating the proliferation of facilities in the private sector. Factors in the social milieu of Kerala, such as high levels of education, settlement patterns, rapid proliferation of health facilities, and changing income distribution, could have contributed to the growing demand for private health care.

## DATA METHODOLOGY
The study used data from various government databases, healthcare websites, and PubMed articles to analyse equity, access, healthcare, health insurance, health economic evaluation, and health technology assessment in India, focusing on the last 10-12 years. The study makes a comparison between the public and the private sector health care provisions incorporating six districts in Kerala. It also makes a comparison world wide to know the status of Indian economy in the health potentiality.

## DATA RESULTS
India's $41 billion healthcare industry is expanding due to factors like declining infant mortality, longer life expectancy, and increasing population. Public health expenditure in India has increased from 1.3% of GDP to 1.4% in 2016-17, with a proposed increase to 2.5% by 2025. The total health expenditure, including private sector, is estimated at 3.9% of GDP. The Department of Health and Family Welfare has seen a 13% annual growth rate, with an additional spending of USD 2159.907 million in 2020-21. Households directly pay for healthcare, with 52% of OOPE going towards medications. Public spending on health primarily involves allopathic medication delivery in urban and rural areas. Only 14% and 19% of rural and urban areas are covered by insurance schemes, pushing 7% of the population below poverty thresholds annually. India's health insurance schemes began in the 1950s with the Central Government Health Scheme (CGHS) and Employees State Insurance Scheme (ESIS). The Insurance Regulatory and Development Authority (IRDA) Bill was passed in 1999, leading to the creation of numerous programs. Since 2007, India has seen a surge in public health insurances, including various schemes for the poor and those below the poverty line.

Health insurance schemes in India include voluntary schemes, mandatory schemes, NGOs, and employer-based schemes. The most recent scheme, 'Ayushman Bharat', was launched in September 2018 and covers over 10 crore poor families and 50 crore beneficiaries. The scheme is funded by NGOs and government grants, patient collection, and donations. The scheme is expected to reduce OOPE, covering nearly 40% of the population, including the poorest and most vulnerable sections. The coverage is based on the Socio Economic and Caste Census database.

The Ayushman Bharat Pradhan Mantri - Jan Arogya Yojana (AB PM-JAY) is the largest publicly funded health assurance scheme globally, providing health cover of Rs. 5 lakhs per family per year for secondary and tertiary care hospitalization. As of 20th December 2023, approximately 28.45 Crore Ayushman Cards have been created, with 9.38 crore created

during the current year. The scheme has authorized 6.11 crore hospital admissions, with 1.7 crore admissions worth over Rs. 25,000 crores authorized in 2023. The scheme ensures gender equity in healthcare access, with women accounting for 49% of the total Ayushman cards created and 48% of authorized hospital admissions. The Ayushman Bhava initiative aims to increase healthcare coverage at the village level, with the National Health Authority launching an Android-based 'Ayushman App' for self-verification.

The Indian government healthcare system comprises primary, secondary, and tertiary facilities, with rural India's healthcare needs addressed by primary health centers and community health centers. These centers cater to 80,000 to 120,000 people and include Accredited Social Health Activists (ASHA), Auxiliary Nurse Midwife (ANM), and Anganwadi workers (AWW). The Ministry of Health and Family Welfare launched programs to promote child development services. The private sector, which includes single-owned practitioners, small nursing homes, and large hospitals, has experienced rapid expansion and dependence on government-sponsored health schemes.

The Universal Health Coverage (UHC) aims to provide healthcare services to everyone without financial barriers. Four key financing strategies are identified by WHO: increasing government budgets, taxation efficiency, development assistance, and innovation in health financing. The National Health Policy 2017 aims to increase health expenditures to 2.5% of GDP by 2025, reduce households facing catastrophic health expenditure by 25%, and launch initiatives like Ayushman Bharat, National Rural Health Mission, and Janani Suraksha Yojana. The National Health Policy aims to deliver quality health services at an affordable cost, and the government has implemented initiatives like health and wellness centers, inclusion of Ayurveda practitioners, hygiene sanitation, immunization coverage, maternal mortality reduction, labor room quality improvement, ICT use, and national programs for AIDS and TB.

## MAIN FINDINGS

- Healthcare Infrastructure Development: The healthcare infrastructure in India has not kept pace with economic growth. India's performance on health, equity, and quality indices is unsatisfactory.
- Government Spending on Healthcare: The percentage of total government expenditure on healthcare in India is 2.9%, which is lower compared to other countries such as the US (18.9%), Germany (17.3%), Japan (17.2%), the UK (15.9%), and China (10.1%). Out of the total health expenditure in India, the contribution of the central government is 17.3%, significantly lower than other countries like the UK (86.3%), Japan (81.3%), Germany (76.9%), the US (44.7%), and China (38%).
- Private Health Expenditure and Out-of-Pocket Expenditure (OOPE): Private health expenditure exceeds government expenditure in India. The majority of health expenditure in India comprises out-of-pocket expenditure (OOPE), indicating a heavy burden on individuals.
- Role of Private Sector in Outpatient Services: The private sector plays a significant role in providing outpatient services in low- and middle-income countries. In India, more than 90% of diarrhoea-affected children approach private healthcare providers, emphasizing the dominance of the private sector in healthcare services.
- The healthcare systems of developed countries like the US and India differ in their private sector and public sector approaches. The US has higher spending per capita on healthcare, low OOPE, and enhanced private health insurance coverage. India, on the other hand, lacks affordable primary and specialty care and widespread insurance coverage. Concerns over rising healthcare costs are common in both countries, and both spend a relatively small percentage of their GDPs on healthcare. China places greater emphasis on the public sector, increasing its healthcare spending faster than India. India ranks 145th among 195 countries on the Health Access Quality (HAQ) index, with large disparities observed in subnational levels of healthcare quality and access. To achieve Universal Health Coverage (UHC), India should emulate developed countries that have successfully implemented UHC, focusing on maximum coverage of healthcare costs by the public sector and fortifying the primary healthcare system. India can also raise more income tax revenue to improve infrastructure and finance for higher public spending on health.

The study mainly focuses on the data from Kerala with a comparison of broad public and private sector and includes measurements comparing its potentiality for sustainability development. This study used a cross-sectional survey of 1200 households from six randomly selected districts. The sample size was 200 households from each district, with each ward selected using simple random sampling. The survey involved two data collectors from each ward, visiting each household until ten households were completed. A respondent from each household was chosen to complete the questionnaire. The proportion of rural and urban samples in each district was proportionate to the population of the individual districts.

| District | Rural pop | Urb pop | Sample rural | Sample urban | Total |
|----------|-----------|---------|--------------|--------------|-------|
| Tvpm | 47 | 53 | 100 | 100 | 200 |
| Thri | 34 | 66 | 60 | 140 | 200 |
| pat | 90 | 10 | 180 | 20 | 200 |
| Ala | 47 | 53 | 100 | 100 | 200 |
| Idu | 96 | 4 | 180 | 20 | 200 |
| Kan | 36 | 67 | 60 | 140 | 200 |
| | | | | | 1200 |

**Table 1:Sample**
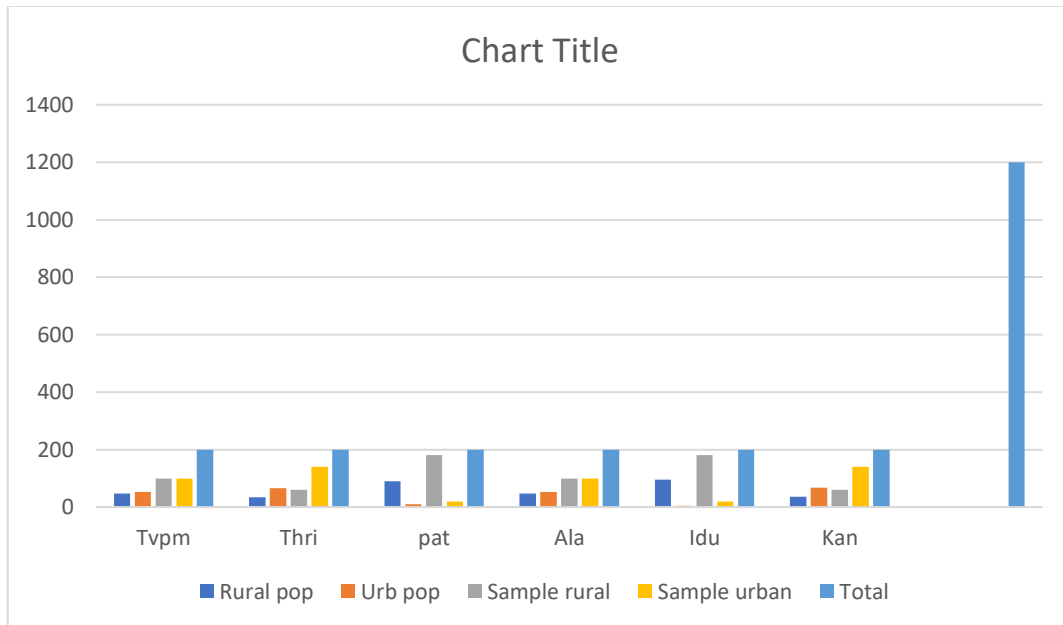
The survey made use of a structured questionnaire to examine health care seeking practices for chronic and acute morbidity, adapted from the NSSO 71st round questionnaire related to social consumption and health.The results postulates that in Kollam district found that 59.3% of the population sought treatment for diabetes, with 60% using modern medicine, 30% using modern medicine and CAM, and 9% exclusively CAM. A study on elderly falls found that 67% sought care from government facilities, 29% from private hospitals, and 4% from general practitioners. A study on diabetes found that 54% preferred private hospitals and clinics, while 26% took treatment from government facilities. Postpartum screening showed that 50.4% used private hospitals, while 57.8% of deliveries took place in private hospitals. A study on gynaecological morbidity found that 52% of perimenopausal women sought treatment in private hospitals. The study surveyed households in Kerala, India, focusing on their drinking water sources. The majority of households had tap water, with one in five having it, and one in five sourcing it from their tube wells. Over half had well as their main source, but close to 10% had potentially low-quality sources like tankers, rivers, and open ponds. The majority of households had their own toilets, with 94% having septic tanks or flush systems. However, 1.6% had no or shared toilets. Around 64% used LPG as the main cooking fuel, while over one-third still used firewood. Hospitalization rates varied across age groups, with older individuals reporting more, followed by those under 10. Insurance coverage also showed significant differences, with no significant difference between males and females.

Kerala has a high population to bed ratio, with 939 hospital beds per 10,000 population in 2017. This is better than other Indian states, but the WHO recommends a global average of 3.98 beds per 1000 population. Health facility density and inpatient bed density are commonly used indicators for national and regional comparisons. However, these indicators can be influenced by variations in hospital size and geographical clustering, leading to erroneous conclusions about service availability and inter-district comparisons.

Health facility density is primarily used to assess outpatient care, but most figures published for Kerala at the state and national levels are based only on facilities under the Directorate of Health Services. Data regarding inpatient beds is published based on sanctioned beds, not functional beds. To assess the efficiency of healthcare services, better indicators like average length of stay during hospitalization and bed occupancy rate should be generated routinely.

Conventional indicators are not useful for gauging regional disparities within and between districts and identifying marginalized groups in terms of availability and access to care. Morbidity rates for acute illnesses and chronic diseases are high, with an increase in chronic diseases morbidity rate indicating the growing burden of non-communicable diseases in the state.

**The study postulates that the private sector has been the primary provider of inpatient and** outpatient curative services in Kerala and India since the 1990s. Surveys show that 62% of inpatient care is provided by the private sector, with 55.5 percent of hospitalization episodes in the previous 365 days being in the private sector. Reasons for seeking private care include unavailability of services, long waiting times, perception of low-quality services, and distance to facilities. In acute illnesses, 61% of people approached a government source or facility, with PHC/CHC being the most common facility. Only 45% of households have insurance coverage, but 24% of claims from the private sector are covered by government insurance schemes. Speciality care, such as cardiology, nephrology, delivery care, and blood bank services, still dominates the public sector.

| Realms | Sector | P Value |
|---|---|---|
| Reliable | Public and pvt | 0.01 |
| Tangible | Public and pvt | 0.86 |
| Responsive | Public and pvt | 0.62 |
| Assure | Public and pvt | 0.79 |
| Empathetic | Public and pvt | 0.88 |
| perceptions | Public and pvt | 0.74 |

**Table 2:P value of public and private sector health care facilities**

| MODEL | β | SD | Beta | Confidence interval | Sig |
|---|---|---|---|---|---|
| Constant | 3.29 | 0.12 | - | 3.05–3.54 | 0.00 |
| Waiting Time | 0.04 | 0.01 | 0.11 | 0.01–0.06 | 0.00 |
| Place of Receiving Services | 0.00 | 0.00 | -0.11 | 0.00–0.00 | 0.00 |
| Type of Services | 0.11 | 0.05 | 0.07 | 0.01–0.21 | 0.02 |
| Education | −0.04 | 0.02 | 0.07 | 0.02–0.08 | 0.04 |
| Occupation | 0.02 | 0.01 | 0.06 | 0.00–0.04 | 0.05 |
|  |  |  |  |  |  |

**Table 3: Linear regression factors affecting the perception of quality health services**

The main findings of the study found out that there is a significant gap in tangible health care quality between public and private sectors, while private sector quality was higher in tangibility. Factors affecting perceptions included waiting time, location of services, services types, education, and occupation of participants. However, no significant difference was observed in other areas of health services quality.

## CONCLUSION

Thus, India's large population has led to overburdened public hospitals, necessitating urgent improvements. The government should support private hospitals, as they significantly contribute to the health sector. To enhance efficiency, more medical personnel should be hired and technology, such as medical gadgets, mobile health apps, wearables, and sensors, should be used. Mental health care services should be improved through increased financing, education, and stigma reduction. Addressing health disparities requires collaboration with other sectors like education, housing, and sanitation. Sustainable health governance can promote efficient healthcare services through better management systems and independent oversight mechanisms. Public awareness of early detection and prevention is crucial for saving money on out-of-pocket expenses. The "one health approach" aims to address the connections between human and animal health. Health plays an important role in maintaining the sustainable development potentiality of Indian economy that is meeting the needs of the present generation without sacrificing the needs of the future generation.

## REFERENCE

1. *https://www.investindia.gov.in/*
2. *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10040988/*
3. *https://pib.gov.in/*
4. *https://www.who.int/news/item/19-05-2023-urgent-action-needed-to-tackle-stalled-progress-on-health-related-sustainable-development-goals*
5. *https://abdm.gov.in/arogyamanthan2023*
6. *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10044314/*
7. *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5074753/*
8. *https://www.emerald.com/insight/content/doi/10.1108/JHR-04-2020-0091/full/html*
9. *https://spb.kerala.gov.in/*
10. *https://www.midukkantony.com/post/health-system-in-kerala*
11. *https://www.improvingphc.org/kerala-india-governance*
12. *https://www.thehindubusinessline.com/news/national/healthcare-sector-is-big-priority-for-kerala-industry-minister-rajeeve/article67318073.ece*
13. *https://www.emerald.com/insight/content/doi/10.1108/JHR-04-2020-0091/full/html*
14. *Panikar PGK, Soman CR. Health Status of Kerala, the Paradox of Economic Backwardness and Health Development. Trivandrum: Centre for Development Studies, 1984: 39.*