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Original Article

SUSTAINABLE DEVELOPMENT GOALS, UNIVERSAL HEALTH COVERAGE AND HEALTH EQUITY: THE ECOSYSTEM

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ABSTRACT

Health represents a foundational pillar of inclusive development and long-term societal progress. Within the global development architecture expressed through the 2030 Agenda, equitable access to healthcare is positioned not merely as a sectoral priority but as a transformative mechanism influencing poverty alleviation, social cohesion, and environmental sustainability. Despite advancements in global health systems, disparities in access, affordability, and quality of care continue to affect marginalized populations. Equitable healthcare is indispensable for achieving sustainable development. Health equity contributes directly to poverty reduction, inequality mitigation, and climate resilience. Institutional reform must integrate financing redistribution, cross-sector collaboration, and community participation. Without embedding justice principles into health system architecture, SDG achievement will remain incomplete. Achieving sustainable development requires embedding equity principles within institutional health governance.

This conceptual paper critically examines the structural, institutional, and environmental determinants shaping health equity and explores their interconnections with the Sustainable Development Goals (SDGs). By integrating perspectives from universal health coverage (UHC), social determinants of health, governance reform, and climate resilience, the study proposes a multidimensional framework for equity-centred health system transformation. The analysis argues that structural transformation in financing, service delivery, and inter-sectoral coordination is essential to align health systems with Sustainable Development Goal (SDG) targets. It argues that sustainable development cannot be realized without systematically addressing inequities embedded within healthcare financing, service delivery, and cross-sectoral policy domains.

Keywords: Sustainable Development Goals (SDGs), Universal health coverage (UHC), Health equity, Social Determinants.

Introduction:

The recognition that health is a precondition for, an out-come of, and an indicator of all three dimensions of sustainable development Health systems are complex adaptive systems shaped by governance structures, financing mechanisms, service delivery models, and social determinants [1]. Equity must therefore be embedded at the design stage of reforms rather than introduced as an afterthought. Health equity is distinct from formal equal opportunity, such as simply providing every individual with equal access to health care [2]. Health equity, defined by the World Health Organization as “the absence of avoidable or remediable differences among groups of people [3],”

Recent global data reinforce the urgency of advancing health equity:

- Approximately **4.5 billion people** lack full access to essential health services [4].
- Nearly **2 billion people experience financial hardship** due to health-related out-of-pocket payments [5].
- Climate change is projected to cause an additional **250,000 deaths annually between 2030–2050** from malnutrition, malaria, diarrhoea, and heat stress [6].
- Maternal mortality remains disproportionately concentrated in low-income countries, accounting for nearly 95% of global maternal deaths [4].

These statistics underscore that expanding service coverage without redistributive reforms is insufficient to close equity gaps. The 2030 Agenda establishes a transformative framework that promotes sustainable development in its three dimensions: economic, social, and environmental. This agenda seeks to “**leave no one behind**”(LNOB), prioritizing equity and social inclusion as fundamental pillars. Health as a key input to sustainable development and human well-being is fundamental to the spirit and pursuit of the 2030 Agenda for Sustainable Development In this context, the 2030 Agenda recognizes that human development cannot be achieved without ensuring healthy living conditions for everyone. This is why access to health and well-being is placed as a central priority, not only as a specific goal (SDG 3), but also as an essential component for achieving the rest of the goals. Many factors that determine people's health status known as social determinants of health are related to the conditions in which people are born, grow, live, work, and age.

Good Health and Well-Being (SDG 3) and the other 16 SDG Almost all of the other 16 goals are directly related to health or will contribute to health indirectly. Furthermore, improving population health helps reduce poverty, increase economic productivity, and strengthen social cohesion. Health equity fits into the context of UHC and health systems. Universal health coverage (UHC) is defined by the World Health Organization (WHO,2019) as when ‘all individuals and communities receive the health services they need without suffering financial hardship’ including ‘health promotion ... prevention, treatment, rehabilitation, and palliative care [7].

Universal Health Coverage (UHC) has emerged as a central operational strategy for promoting equity. This delivers human right to health by ensuring that ‘all people have access to the full range of quality health services they need, when and where they need them, without financial hardship UHC covers the full continuum of essential health services, from health promotion to prevention, treatment, rehabilitation and palliative care. On December 12, 2012, the United Nations General Assembly unanimously supported a resolution urging nations to hasten their advancements towards Universal Health Coverage (UHC). Achieving UHC is one of the targets the nations of the world set when they adopted the 2030 Sustainable Development Goals (SDGs) in 2015 [8]. However, expanding coverage alone does not guarantee equitable outcomes; quality of care and financial protection remain critical dimensions [9]. The path towards UHC is expected to look different in each country and will depend on a number of factors, including health system organisation, resources available, and political structures and governance [10].

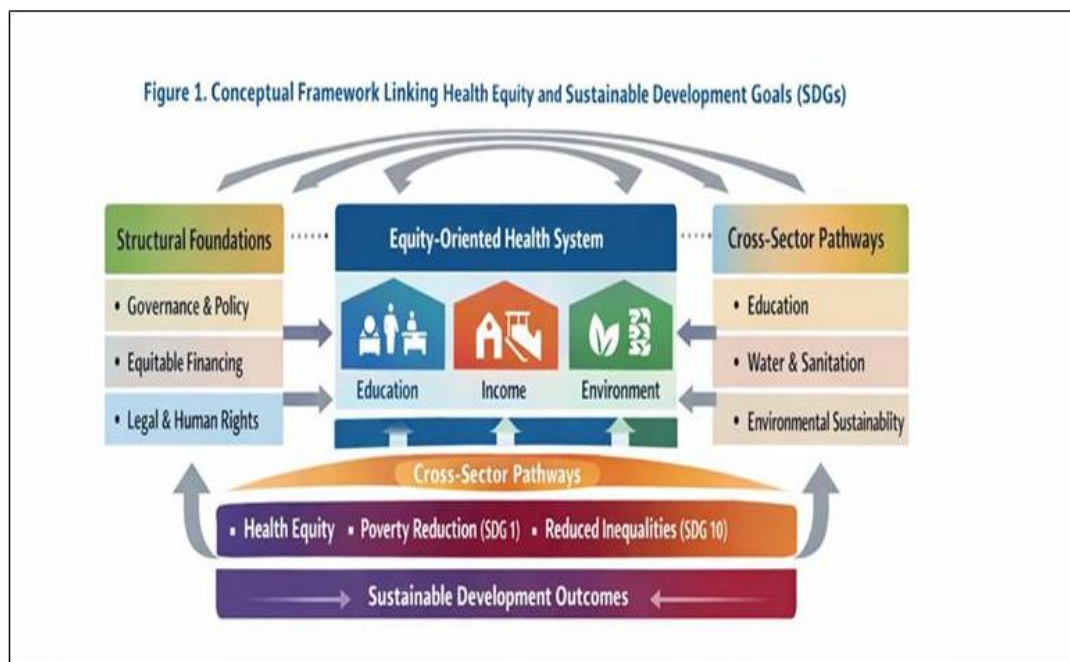
UHC — ensuring access to essential health services without financial hardship — is central to SDG 3.8. Evidence shows that resilient health systems oriented toward UHC not only improve individual access but also buffer against catastrophic healthcare expenditures for vulnerable households UHC involves three dimensions: *population coverage*, *service coverage*, and *financial protection* [11]. Recent reviews highlight that high quality of care is a precondition for meaningful UHC impacts; without quality services, coverage expansion alone fails to improve health equity Universal Health Coverage, championed by the World Health Organization and embedded in SDG target 3.8, ensures that all individuals receive needed health services without suffering financial hardship [12]. However, structural inequalities—poverty, gender discrimination, environmental degradation, and political instability—continue to undermine equitable access to care.

2024–2027 Strategic Framework of UHC2030 outlines its current operations and contributions as it progresses towards the upcoming UN high-level meeting on UHC in 2027, and in the final phase leading up to the 2030 milestone for the SDGs [13]. Health Equity is an Architect for Sustainable Development. Equitable access to health care for all is undoubtedly a benchmark, recognised in the Millennium Development Goals and its follow-on, the recently announced Sustainable Development Goals (SDGs). The interconnectedness of the SDGs is clear such as where healthy lives and well-being for all (Goal 3) is interlinked with ending poverty and hunger (Goals 1 & 2), reducing inequalities (Goal 10), providing clean water and sanitation facilities (Goal 6), protecting the environment (Goals 7, 13, 14, 15), providing decent work (Goal 8), ensuring gender equality (Goal 5) and having access to quality education (Goal 4). The underlying values of equity expressed is then meant to be actualised in universal health coverage (UHC) whose goal is to ensure that all people obtain the health services they need [14] and is now becoming the significant SDG health goal that links equitable social and economic development, and combines financial risk protection with equitable access to essential services [15].

Linking Health Systems and Sustainable Development

Health equity constitutes a foundational requirement for sustainable and inclusive development. Within the global framework of the 2030 Agenda adopted by the United Nations, equitable healthcare is recognized not only as a sector-specific goal under SDG 3 but as a cross-cutting determinant influencing poverty alleviation, gender equality, environmental sustainability, and reduced inequalities. Despite improvements in health service expansion, substantial disparities persist in access, affordability, and quality of care, particularly among socio-economically marginalized groups [4]. Modern health governance increasingly adopts systems-based approaches. In this paradigm, health outcomes are viewed as the cumulative result of institutional arrangements, financing structures, environmental exposures, and socio-cultural determinants. Consequently, equity must be embedded into the architecture of policy design rather than appended as a corrective afterthought. Within the global framework of the 2030 Agenda adopted by the United Nations, equitable healthcare is recognized not only as a sector-specific goal under SDG 3 but as a cross-cutting determinant influencing poverty alleviation, gender equality, environmental sustainability, and reduced inequalities [15].

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Health equity as the outcome of interconnected governance, financing, and rights-based structures. At the foundation lie institutional commitments to inclusive policy design and equitable resource mobilization. These foundations support a health system organized around comprehensive coverage, financial risk protection, and quality assurance. Surrounding this core are cross-sectoral pathways including education systems, sanitation infrastructure, and environmental management that influence health determinants

Social Determinants of Health: The social determinants of health (SDH) are the non-medical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live, age, and the broader set of forces and systems shaping daily life conditions. The SDH has an important influence on health inequities - the unfair and avoidable differences in health status seen within and between countries. In countries at all levels of income, health, and illness follow a social gradient: the lower the socioeconomic position, the worse the health. The landmark report of the Commission on Social Determinants of Health (2008) emphasized that health inequities arise from social determinants such as income, education, housing, employment, and environmental conditions.



Healthcare outcomes are shaped by broader social conditions. Income security, educational opportunities, environmental quality, housing adequacy, and occupational safety collectively determine population health trajectories. Addressing these determinants requires multi-sectoral coordination across ministries responsible for finance, education, housing, labor, and environmental regulation. For instance, inequities in prenatal healthcare utilization remain strongly correlated with socio-economic disparities [15]. Addressing these upstream determinants requires multi-sectoral coordination between health ministries and agencies responsible for sanitation, education, labor, and environment.

Components of an Equity-Centred Health System This layered representation highlights four interrelated pillars:



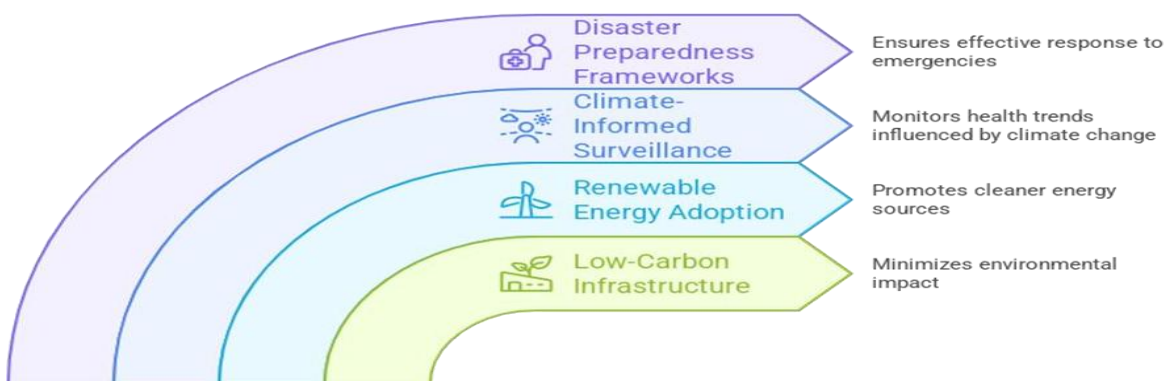
- **Participatory Governance:** Transparent and accountable decision-making.
- **Comprehensive Service Provision:** Accessible preventive and curative care.
- **Community Engagement:** Inclusion of local knowledge and lived experiences.
- **Resilience Capacity:** Preparedness for climate, disaster, and public health emergencies.

Together, these elements enhance access, service quality, and systemic adaptability.

2.3 Sustainability–Health Nexus

Environmental degradation and climate variability exert measurable effects on health outcomes. The IPCC (2022) confirms that climate change increases the incidence of heat-related illnesses, vector-borne diseases, and food insecurity. Healthcare systems must therefore incorporate climate resilience and environmental sustainability to prevent widening inequities. Health and sustainability operate in a mutually reinforcing cycle. Healthy populations contribute to economic productivity and innovation, while sustainable environmental practices reduce disease burdens linked to pollution and climate change. Therefore, embedding sustainability principles into health system operations — such as energy-efficient hospitals and climate-responsive surveillance systems — supports both ecological and human well-being.

Figure:4- Components of Sustainable Health Systems



India: Advancing Equity through Structural Health Reforms:

India provides a useful and complex example of how equity-oriented health system reform can be pursued within a large, diverse, and decentralized health system. Historically, India's high out-of-pocket (OOP) health expenditure has been a major barrier to equitable care. According to the World Bank (2024), OOP expenditure accounted for approximately **40 % of total health spending**, significantly above the threshold recommended for financial protection [5]. India's health system reforms especially Ayushman Bharat and expanded primary care demonstrate real progress in reducing financial barriers and expanding access. However, persistent regional disparities, social determinants, and emerging climate risks indicate that equity remains an unfinished agenda. Integrating equity-oriented planning, climate resilience, and digital inclusion offers a roadmap for sustainable progress toward the SDGs.

Universal Health Coverage through Ayushman Bharat:

In response to persistent financial hardship and inequitable access, the Government of India launched **Ayushman Bharat** in 2018 — a flagship program with two major components:

- **Pradhan Mantri Jan Arogya Yojana (PM-JAY):**

Focused on *secondary and tertiary care financial protection*, PM-JAY covers over **500 million beneficiaries** from socio-economically vulnerable households. This program aims to reduce catastrophic health expenditure and expand coverage for major inpatient services.

- **Health and Wellness Centres (HWCs):**

More than **75,000 HWCs** have been operationalized as of 2025, aimed at transforming primary healthcare delivery. HWCs provide preventive, promotive, and basic curative services, including maternal and child health, non-communicable disease (NCD) screening, and essential diagnostics.

These reforms align with SDG 3.8 on Universal Health Coverage and represent one of the largest government-initiated equity interventions globally. Recent data from the World Health Organization (2024) suggest increased outpatient utilization among low-income groups, indicating improved access attributable to HWCs.

Ayushman Bharat is India's powerful initiative to achieve Universal Health Coverage, delivering comprehensive healthcare services and financial protection to all citizens. The program has made remarkable strides in overcoming infrastructure challenges, but addressing ethical concerns and ensuring equitable access are essential for its continued success. With robust investments, strong regulatory measures, and effective collaboration among stakeholders, we are poised to fully realize the vision of UHC in India [18-20].

CONCLUSION:

Good health is essential to ensure well-being for individuals, society and nations. Equitable healthcare remains a central tenet of global development agendas, reflecting both social justice and strategic investment in human capital. The United Nations General Assembly 2030 Agenda for Sustainable Development situates health equity at the core of its framework, most prominently through Sustainable Development Goal 3 (Good Health and Well-Being). Yet, progress towards equitable health access continues to be uneven due to systemic socio-economic disparities, environmental crises, and governance challenges. We conclude by identifying actionable policy levers for governments, international organizations, and civil society to align health equity with broader SDG achievement.

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