

Ayurveda and Yogic Traditions as Preventive Health Models for the 21st Century

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Abstract: The global rise in lifestyle diseases, mental health disorders, and healthcare costs highlights the limitations of reactive, disease centered medical models. Indian Knowledge Systems, particularly Ayurveda and Yoga, offer a holistic and preventive approach to health rooted in balance, lifestyle regulation, and mind-body integration. Classical Ayurvedic texts define health (svasthya) as equilibrium among physiological systems, mental wellbeing, and harmony with the environment. Preventive practices such as dinacarya, ritucarya, personalized nutrition, and yogic discipline address root causes rather than symptoms of disease. In the contemporary context of stress, sedentary lifestyles, and psychosomatic illness, these practices provide cost effective and sustainable healthcare solutions. This paper examines the relevance of Ayurvedic and yogic principles in modern integrative medicine, mental health management, and public health policy, demonstrating their potential contribution to sustainable healthcare systems.

Key Words: *Indian Knowledge Systems, Ayurveda, Yoga, Holistic health, Mind-body integration, Sustainable healthcare*

Introduction

Healthcare is the essential components of social health, it crucially impacting of life. Today many challenges, including long term diseases and environmental problems are increased (Springer Proceedings in Business and Economics SPBE 2025). So this needs strong and effective primary health care (PHC). PHC includes preventive, diagnostic, and therapeutic services at the community level. PHC is the base of improving good health care system. It is closely connected to the Sustainable Development Goals (SDGs) established in 2015 by the

United Nations General Assembly (SPBE 2025). The aim of SDGs to get rid of poverty, protecting the planet, and advance the prosperity by 2030, and it also provide a strategic structure for the integrated approach to healthcare, and social justice (SPBE 2025). SDG enhance the overall quality of services, promote sustainable development and reduce inequalities. In many developed and resource limited countries, they mainly focusing on hospitals and specialised care. This leads to weaken the primary health service; it leads to increased load on secondary and tertiary services, higher costs. Countries that invest more in strengthening PHC systems often experience benefits across several areas. In particular, access to high-quality primary care has been linked to lower mortality rates, better access to healthcare services, and improvements in overall population health outcomes (SPBE 2025). To accomplish these goals, a coordinated set of multidimensional interventions is needed, with a focus on preventing and managing chronic conditions such as cardiovascular conditions and diabetes, promoting education and healthy lifestyles, and improving access to healthcare services. Implementing SDG initiatives that emphasize environmental protection and sustainable development helps foster healthier living conditions and improves public health outcomes. Adopting measures in healthcare facilities to minimize energy use and reduce waste generation further supports sustainability efforts, as environmental deterioration can have significant adverse effects on population health (SPBE 2025).

1. Indian Knowledge Systems as Holistic and Preventive Health Paradigms

In the 21st century, people around the world are facing numerous health challenges, many of which can lead to chronic diseases. These conditions are often linked to unhealthy lifestyles and rising mental health issues. While modern medicine is widely used, it often focuses on treating symptoms rather than addressing the root causes of illness. As a result, holistic health approaches that emphasize the balance of body, mind, and spirit are gaining popularity, particularly in Western countries. India's ancient health practices, especially Ayurveda and Yoga, are at the forefront of this movement. Rooted in thousands of years of tradition, these practices have attracted growing interest in the West over the past decades. Yoga, in particular, stands out for its holistic approach, combining breathing techniques, physical postures and meditation to enhance overall well-being. Scientific studies have shown that yoga can reduce stress, improve heart health, and help individuals achieve inner balance and harmony with their environment.

Indian Knowledge Systems (IKS), including Ayurveda and Yoga, offer holistic and preventive approaches to health that have evolved over thousands of years. Unlike conventional medicine, which often focuses on treating symptoms, these systems emphasize maintaining balance in the body, mind, and spirit to prevent illness before it arises.

1.1. The rise of Ayurveda in modern healthcare

Traditional practices like Yoga and Ayurveda are gaining popularity worldwide, attracting growing interest for their holistic approach to health. Ayurveda, meaning "the science of life," emphasizes balance among the body, mind, and environment, offering tools such as dietary guidance, massage, herbal remedies, and detoxification therapies. In recent years, Ayurvedic principles have become part of wellness discussions across Europe and North America. A growing number of healthcare and wellness centers provide Panchakarma cleansing therapies, while Ayurvedic dietary practices and herbal remedies originating from India have gained widespread recognition and acceptance. Western companies have also introduced products like turmeric beverages, ashwagandha supplements, and herbal teas. While these practices continue to be studied scientifically, their emphasis on natural, preventive care has contributed to their global appeal (Verma Sunil Kumar et al.2024).

1.2. Modern consumer perspectives on Indian holistic health systems

Indian holistic wellness practices have influenced Western lifestyle. The rapid growth of the global yoga industry has led to a thriving market for clothing and equipment, while Ayurvedic products continue to gain popularity in diverse regions worldwide. Western celebrities are promoting meditation and Ayurvedic clean diets, which has increased their popularity. Indian companies such as Patanjali Ayurveda have significantly contributed to the promotion of Ayurveda and natural wellness products, expanding their reach both across India and in international markets. As more people question pharmaceutical products like medicines, It cause environmental degradation, and stress of current life. India's holistic healthcare traditions offer a promising perspective by recognizing individuals as interconnected and multifaceted beings, an aspect that is often underemphasized in many conventional medical models (Jennifer, and Amy Howerter 2019).

1.3. Concept of *Swasthya* and Sustainable Health in Ayurveda

The concept of *Swasthya* is important in Ayurveda for understanding health and disease. Although modern medicine have increased long life, further it also leads to causing some

other health problems. Ayurveda looks at health in holistic way, which means it cares about the body, mind, and spirit. Even though people live longer today, but they may to always live with good health and peace (Kumar, Pawan, and Seema Rani 2025). The word Swasthya holds a significant place in Sanskrit. "Swa" refers to the self or one's own nature, while "Stha" denotes a state or condition. Together, Swasthya signifies being stable and balanced within oneself. Ayurveda defines health as more than simply being disease-free. It is a harmonious state of equilibrium among Sharira (body), Manas (mind), and Atma (soul). This balance is essential for both physical and mental well-being.

1.3.1. Ayurveda

According to Ayurveda – the world's oldest, continuously practiced medical system medicine a swastha is a healthy individual who fully embodied swasthya a state of integrated well-being. Classical Ayurvedic texts, particularly the *Chakra Samhita*, articulate a profound philosophical understanding of health, stating that the individual is microcosm of the universe. The concept suggests that all material and spiritual elements present in the cosmos are reflected within the human being, and likewise, the individual contains within themselves the essence of the universe. Maintaining balance in daily life is a central principle of Ayurveda for preserving health and preventing disorders. Lifestyle includes adequate rest, regular physical activity, and appropriate nutrition. Ayurvedic practices such as yoga and meditation help alleviate stress and enhance mental well-being. In addition to their health benefits, these practices have a minimal environmental footprint because they require few or no material resources. (Ramachandra Krishna, et al.1985).

1.3.2. The Role of Herbal Medicine in Ayurveda

Herbal medicine constitutes a core component of Ayurvedic therapeutics. Ayurvedic medicines are employing by using a wide range of herbal plants to prevent diverse disease conditions. Emphasizing individualized treatment based on a patient's constitution. In contrast to some modern pharmaceutical medications that may produce unwanted side effects, Herbal preparations are often considered to have a favorable safety profile and therapeutic value. Ayurvedic herbal medicines are traditionally as relatively safe when prescribed and administered appropriately. Beyond their therapeutic benefits, Ayurvedic practices encourage the sustainable cultivation and responsible harvesting of medicinal plants to ensure their long-term availability. This approach helps conserve biodiversity, protects the

environment, and contributes to health security for future generations by preserving valuable natural resources. (Sharma, Bhartendu, et al. 2025).

1.3.3. The Role of Nature in Ayurvedic Health and Healing

Ayurveda regards nature as the primary foundation of health and healing. According to Ayurvedic philosophy, the five elements earth, water, fire, air, and space constitute the basis of all existence, and every living and non-living entity is considered to be composed of these elements. According to Ayurvedic thought, both the human body and the external environment are composed of these elements, and health is achieved through their dynamic balance. Ayurveda extends beyond environmental conservation alone; it encompasses the preservation of ecological balance as an essential prerequisite for maintaining individual and collective health (Bhattacharyya, Angkita (2026). Ayurveda emphasizes a balanced lifestyle as a key approach to health promotion and disease prevention, stress management, integrating proper rest and physical activity. Practices such as yoga and meditation play a vital role in reducing psychological stress and supporting overall mental well-being.

1.3.4. The Role of Food in Ayurveda

In Ayurveda philosophy, food (*Ahara*) is regarded not merely as a source of nutrition but as a potent form of medicine essential for maintaining health and preventing disease. Ayurvedic dietary principles emphasize the consumption of, fresh seasonal and locally sourced foods, as these are believed to align optimally within an individual's physiological needs and the surrounding environment. Such practices enhance nutritional value. Furthermore, Ayurveda predominantly advocates a plant-based dietary pattern and generally discourages excessive consumption of animal-derived products (Kumari, Shilpa, et al. 2025; S, Sreenisha S., et al.2021).

2. Preventive Healthcare Practices in Ayurveda (Dinacharya, Ritucarya, and Personalized Care)

Ayurveda strongly emphasizes the principle that prevention is better than cure. To maintain health and prevent disease, it advocates adherence to proper daily and seasonal regimens along with individualized lifestyle practices. One of the most significant preventive concepts described in Ayurveda is Dinacharya, which refers to a structured daily routine. The term Dina means “day” and Charya denotes “practice” or “conduct,” highlighting the importance

of consistent daily habits in promoting physical, mental, and spiritual well-being (Wisdomlib.org. 2024).

Following a proper daily routine helps a person live a healthy, balanced, and disease-free life. According to researchers, the classical Ayurvedic texts explain that diseases affected both body (sharira) and the mind (Manas), showing that Ayurveda gives equal importance to physical and mental health. Dinacharya helps in maintaining balance within the body, regulating the biological clock, improving digestion and metabolism, and promoting discipline, mental peace, happiness, self-confidence, and longevity.

Table: 1. Key Principles and rules of Dinacharya

Dinacharya Practices	
Brahmmuhurte Jagrana	Ayurveda recommends waking up during Brahma Muhurta, which is about 96 minutes before sunrise. This time is considered ideal for waking up because the environment is calm and peaceful. It helps improve mental clarity, positively, and freshness (Baliram, 2026). During this time, <i>Vata dosha</i> is dominant, which supports easy bowel movement. Waking up early also encourages prayer, study, and self-reflection, which support both mental and spiritual health.
Malotsarga Vidhi	It's a key part of daily routine, promoting overall well-being by synchronizing bodily functions with natural rhythms. Urine and stool should be passed only when there is a natural urge, and these urges should never be suppressed, as doing so can cause health problems. Ayurveda advises maintaining silence and concentration during this process for proper evacuation. Proper elimination keeps the body light and helps prevent digestive problems.
Achmana,	Achamana refers to cleansing the body with water and is advised after activities such as waking up, eating, bathing, sneezing, or coming into contact with impurities.
Danta Dhavana,	Teeth should be cleaned using herbal sticks with bitter, pungent, or astringent tastes, as these help reduce Kapha dosha, which is mainly responsible for oral diseases.
Jivha Nirlekhana	Tongue cleaning removes bad breath, improves taste sensation, and supports digestion. Washing the face and eyes with clean water or herbal

	preparations helps improve vision and prevents skin and eye disorders.
Anjana	There are two types of Anjana. Souvira Anjana is recommended for daily use to maintain clear and healthy eyes. It helps prevent burning, itching, discharge, and pain in the eyes. Rasa Anjana is advised occasionally to remove excess Kapha dosha from the eyes.
Nasya	The nose is considered the gateway to the head. Nasya therapy involves the administration of medicated oils or substances through the nostrils. It helps balance Vata dosha, nourishes the head and neck region, and prevents disorders of the brain and sense organs. Nasya is also beneficial in preventing hair fall, neck stiffness, facial paralysis, sinusitis, and other conditions related to Vata imbalance.
Gandusha and Kavala	Gandusha uses a larger quantity, filling the mouth completely with no movement, held briefly, while Kavala uses a smaller amount that can be swished and gargled for longer, drawing out toxins for better oral and systemic health. These practices strengthen the jaw, improve taste, enhance clarity of the mouth, and support the health of sense organs. They also help maintain oral hygiene and freshness.
Dhumapana	Dhoomapana refers to medicinal smoking in Ayurveda. It is of three types: Prayogika, Snaihika, and Virechanika. Among these, Prayogika Dhoomapana is recommended for daily practice. It helps prevent disorders of the head and neck caused by Kapha and Vata doshas. When performed properly, it provides a feeling of lightness in the chest, throat, and head.
Vyayama	Vyayama is the Sanskrit term for physical exercise, central to Ayurveda and Yoga. Regular physical exercise builds strength, balance the body, calm the mind, and promote overall well-being. It reduces excess fat, prevents obesity, delays aging, and lowers the risk of heart disease. Exercise also removes laziness and keeps the body active and light.
Abhyanga	Abhyanga is a traditional Ayurvedic practice of full-body massage using

	warm, herb-infused oils, performed as a ritual for holistic wellness, balancing doshas, and nurturing tissues. these practices strengthens the body, reduces fatigue, and helps balance Vata dosha. Head massage promotes good sleep and nourishes the sense organs, while foot massage strengthens the legs, improves vision, and supports sound sleep. Seasonal oil massage is recommended according to the climate.
Udwartan	Udwartana is a traditional Ayurvedic therapeutic massage using dry or medicated herbal powders such as chickpea flour, sandalwood, turmeric, barley powder. It helps open skin pores, improves complexion, reduces excess fat, relieves itching, and helps prevent skin problems.
Snana	It refers to a holistic cleansing practice in Ayurveda, going beyond simple hygiene to balance mind, body, and spirit using herbal powders, oils, or specific rituals for health and spiritual purification. It improves strength, vitality, cleanliness, and longevity, and helps remove fatigue, sweat, and body impurities. However, Ayurveda advises avoiding bathing immediately after meals, as it may disturb digestion.
Bhojana Vidhi	Bhojana Vidhi is the rules and methods of eating food which recommends consuming food in a specific sequence of tastes, beginning with sweet, followed by sour, salty, bitter, pungent, and astringent tastes. Ayurveda, which are important not only for physical health but also for spiritual benefits and mental peace; it includes purification before eating, sitting in the right direction, concentration, order of taste of food, stomach balance and drinking buttermilk after meals, which is different from modern cooking methods. Following this order helps improve digestion, supports proper nourishment of tissues, enhances strength and complexion, and promotes clarity of the senses.

Ritucharya

Ritucharya is the Ayurvedic way of changing our food, daily habits, and lifestyle according to the seasons. Ayurveda teaches that our body is connected to nature. As the seasons change, our body and mind also adjust accordingly. It is an ancient Ayurvedic practice of following a seasonal discipline in diet, lifestyle, and behavior to align with nature's cycles, each season

affects the three doshas Vata, Pitta, and Kapha in different ways. If we do not adjust our habits and food, these doshas can get out of balance and cause sickness. By following Ritucharya, we can stay healthy, boost immunity, and prevent seasonal illnesses (Thakkar, Jayesh, et al. 2011). Our body loses energy and fluids due to heat during summer. Ayurveda advises eating light, cooling, and hydrating foods, drinking enough water, and avoiding excessive physical activity. In contrast, during winter, digestion becomes stronger, so nourishing and warm foods, oil massage, and regular exercise are recommended to maintain strength and warmth (Thakkar, Jayesh, et al. 2011)

According to Ayurveda, during the rainy season digestion becomes weak, increasing the risk of infections. Therefore, it is advised to eat easily digestible foods, avoid contaminated food and water, and maintain proper cleanliness. During spring, Kapha dosha increases, so lighter foods, physical activity, detoxifying practices are encouraged to prevent congestion and sluggishness. Ritucharya is not just about avoiding disease; it is about improving overall well-being. It helps the body adapt naturally to environmental changes, keeps digestion strong, supports mental balance, and enhances immunity.

3. Yoga and mind-Body Integration for Mental Health and well-Being

Yoga originated thousands of years ago in ancient India as a practice to harmonize the body, mind, and spirit. Its roots can be traced to the Indus Valley Civilization, where archaeological evidence and early images suggest the practice of yogic postures. The word yoga is derived from the Sanskrit term 'yuj,' which means 'to join' or 'unite,' symbolizing the harmony of the body, mind, and overall well-being. Evidence of yoga-like postures found at archaeological sites indicates that its origins may date back to around 3000 BCE in the Indian subcontinent. Over time, yoga evolved into a structured system that includes practices for example asana (postures), pranayama (breathing exercise), and meditation, which are widely used to promote physical and mental health. Today, yoga is also recognized for its role in stress management and in improving conditions such as chronic asthma and multiple sclerosis. (Hayes, Meg and Sam Chase 2010).

3.1. Integrative Health Wellbeing Lifestyle

It means the combination of both the modern and traditional health practices in living. It brings together life-style based advice from modern medicine like healthy eating, regular exercise, and good sleep with ancient practise such as Ayurveda, Yoga, and meditation. The

goal is to take care of a person as a whole, supporting physical, mental and emotional well-being rather than focusing on just one part of health (Engineer, Altaf, et al. 2021).

Therapeutic yoga is the use of yoga to help manage and treat health problems. Regular yoga can ease stress related issues like headache, asthma, high blood pressure, diabetes, heart disease and stomach problems it also help with problems like anxiety, depression, OCD and addiction. Yoga supports the body in dealing with joint and muscle pains backache, obesity and blood sugar and improving cholesterol level, and managing weight. Yoga can reduce major and non-communicable diseases. For some people practicing yoga regularly even helps them to reduce or stop certain medications under medical guidance (Shinde, Viraj Ashok, et al. 2025).

3.2. Yoga is a Powerful Way to Settle and Relax the Mind

According to Indian Journal of Community Medicine 2024, many mental health problems are linked to disturbed thinking and yoga, emotions can be helpful tool in managing them. Although yoga is a broad practice modern studies mostly focus on three main parts: Yoga postures, meditation and breathing exercises. Research from around the world, including controlled studies has shown that yoga can: reduce anxiety, improve sleep, reduce symptoms in schizophrenia, enhance social interactions and thinking and improve mood in depression and bipolar disorder, and can treat Cardiac problem, parkinson's disease, Alzheimers disease, pulmonary disorders (Komal Kumari, and Sweta Pathak 2025).

3.3. Changing Health Status and Sustainable Development

Even though people today are living longer than before, it doesn't always mean they are living healthier or feeling better. SDG-3 aims to ensure "health and wellbeing for everyone" by 2030, reminding the world that wellbeing is just as important as living longer. However, progress toward this goal has faced setbacks. The COVID-19 pandemic slowed down or even reversed improvements in healthy systems and development efforts worldwide. And it's not just COVID-19 before that, disease like SARS and Ebola showed how quickly outbreaks can spread globally (Krishnamurthy Jayanna (2023).

4. Addressing Lifestyle and Non-Communicable Diseases through Ayurveda and Yoga

4.1. Non- Communicable Diseases through Ayurveda

The increasing prevalence of noncommunicable diseases (NCDs), along with rising healthcare expenditures, represents a significant challenge for Organisation for Economic Cooperation and Development (OECD) countries (Egwumba, Patricia, et al.2025)

Personal belief and values

- Cultural background and traditions
- Feeling that Western medicines did not fully meet their needs
- A desire for more holistic and balanced approach to medicines

People felt that ayurveda supported the idea of taking responsibility for their own health and offered a philosophy that made sense to them focusing on balance, prevention and connection between the body, mind and lifestyle. However, this empowerment also came with difficulties. Ayurvedic treatments can be demanding and require strong commitment, which was hard for those without enough support. Overall the study shows that seeking ayurvedic care is not just about treating symptoms. It is all about finding meaning, maintaining identity and choosing a healing approach that fits personally, culturally and philosophically (Egwumba, Patricia, et al.2025).

This traditional practice improves mental and physical health and it plays an important role in maintaining Non-Communicable diseases, especially those caused by inactive and unhealthy lifestyles. When added to daily routines yoga helps the counter effects of long hours of sitting, which is one of the biggest contributions if NCDs (Salwa, Hyndavi, and Pradeep M.K. Nair 2020)

4.2. The Global Initiative to Enhance Physical Activity

The Global Action Plan on Physical Activity (2018–2030) highlights the importance of increasing physical activity, with the goal of reducing physical inactivity by at least 15% by 2030. It encourages daily engagement in activities like yoga, dance, walking, cycling, and other sports to help people remain active. However, as technology advances and urban lifestyles become more prevalent, levels of physical activity are declining, leading to a rise in lifestyle-related diseases (Salwa, Hyndavi, and Pradeep M.K. Nair 2020).

Unhealthy lifestyle patterns, such as poor dietary habits and physical inactivity, are significant contributors to non-communicable diseases. Ashtanga Yoga, as outlined by Rishi Patanjali, provides a holistic lifestyle framework through its eightfold path.

Flexibility in muscles can be done by Yoga, it engages different muscles both smooth and skeletal muscles can be adjusted to suit people of all ages and fitness levels. Adolescents, adults and older individuals can all practice yoga at their own intensity and pace. Regular practice can help of lower several risk factors for NCDs, such as high cholesterol, obesity, high blood pressure, and mental stress. While many NCDs cannot be cured easily and Treatments are an expensive yoga can help delay disease progression, promote healthy aging, and promotes premature deaths linked to chronic illness (Salwa, Hyndavi, and Pradeep M.K. Nair 2020). The components of yoga, including Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana, and Samadhi, offer a comprehensive approach to health and well-being. By fostering physical and mental balance, these practices can contribute to the prevention of NCDs.

5. Effective and Equitable Healthcare: Contributions SDG 1 and 3

5.1. Aims to End Poverty Everywhere SDG-1

SDG-1 it is aims to increase poverty and health systems play a major role in whether the people fall into poverty or stay out of it. When people have to pay a lot from their own pocket for medical treatment, they may face may face serious difficulties. Catastrophic health spending occurs when healthcare costs disrupt a household's ability to afford essentials or push them into poverty. Poor households are most affected, but impacts vary by country, with higher public health investment generally reducing out-of-pocket expenses. (Hyndavi Salwa and Pradeep M.K. Nair 2020). As a result, fewer people experience catastrophic expenses or fall deep into poverty. To reduce financial burden on people governments can improve coverages for policies. Healthcare systems should focus on maintaining overall welfare, supporting both body and mind through practices like yoga.

5.2. Health and Well-Being for Everyone SDG-3

The world has made significant progress in improving health in recent years. Among approximately 200 countries, 146 have either achieved or are progressing toward the Sustainable Development Goal target for reducing mortality among children below five years of age. In addition, advances in HIV treatment have led to a 52% decline in AIDS-related deaths since 2010, and 47 countries have successfully eliminated at least one neglected tropical disease. Despite these achievements, access to healthcare remains unequal, and the COVID-19 pandemic has slowed progress, causing drops in childhood vaccination rates and increases in deaths from tuberculosis and malaria. The SDGs seek to end epidemics such as

AIDS, tuberculosis, and malaria by 2030 while promoting universal health coverage to ensure that all individuals can access safe, effective, affordable medicines and vaccines. To recover from setbacks and strengthen healthcare, countries must invest in resilient health systems that can keep progress on track and better prepare for future health challenges (University of Saskatchewan, 2024).

Millions of people still lack access to essential healthcare, and closing this gap requires equitable systems that address social, environmental, and commercial determinants of health to achieve “Health for All” and the Sustainable Development Goals. Building a healthy world demands strong commitment and timely action, as healthy populations strengthen societies and economies. Although vaccination is one of the most effective and affordable health interventions, recent sharp declines in childhood immunization—the largest in nearly three decades—have left millions of children vulnerable to preventable diseases.

6. Integrative Medicine, Public Health Policy, and SDG Alignment

According to World Report on Ageing and Health, WHO, 2015, Population ageing is a major global health challenge, with the WHO highlighting the rapid rise in the number of adults aged 65 years and above. To address this, the WHO promotes a holistic, person centred approach that goes beyond treating individual diseases and emphasizes prevention, wellbeing, and functional ability. The concept of successful ageing shows that ageing can be shaped through healthy lifestyles, physical and mental activity, and social engagement. Although genetics play a role, lifestyle and preventive measures have a greater influence, making integrative medicine approaches valuable for promoting healthy and active ageing in older adults (Teut Michael, and Miriam Ortiz.2021).

The principles of whole food nutrition, including carefully planned vegetarian and vegan diets as well as the Mediterranean diet, are primarily based on a high intake of plant derived foods. This dietary pattern has been linked to a lower likelihood of developing chronic conditions, including coronary heart disease, stroke, diabetes mellitus, and various forms of cancer. Moreover, shifting from meat heavy diets to predominantly plant based diets contributes significantly to climate protection by lowering environmental impacts (Shannon, Oliver M., et al. 2021).

Caloric restriction has emerged as a prominent area of interest in anti-ageing research. Evidence from extensive laboratory and animal studies shows that reducing caloric intake in organisms ranging from yeast and insects to rodents and primates is associated with enhanced

health and increased lifespan. In particular, studies in monkeys have demonstrated that a roughly 30% reduction in calorie intake significantly lowers the incidence of adult-onset diabetes, cardiovascular diseases, and cancer, while also reducing biological markers of ageing (Rhoads, Timothy W., et al.2020). In humans, caloric restriction has been linked to various health benefits; however, definitive evidence for lifespan extension is still lacking. Fasting, a long-standing practice in integrative and traditional medicine across many cultures represents a practical form of caloric restriction and has already demonstrated multiple health advantages. Ongoing research is expected to clarify the effects of different fasting patterns, including intermittent fasting, on ageing, disease risk, and mortality. Calorie restriction may not be suitable for older adults experiencing malnutrition, eating disorders, frailty, or cachexia. However, it can offer potential health benefits for healthy elderly individuals who are of normal weight or overweight (Teut Michael, and Miriam Ortiz.2021).

Putting health at the centre of all policies is essential for addressing the social causes of ill health and reducing inequalities, yet many public health professionals feel underprepared and lack confidence or experience in policy advocacy (Cohen, Benita E., and Shelley G. Marshall 2016). Effective advocacy requires more than technical expertise, relying also on political awareness, strategic communication, relationship-building, and the ability to navigate contested policy environments, skills that are often poorly taught in public health training and instead developed informally through mentoring and real world experience. Moreover, successful policy influence depends on public health professionals being perceived as credible, trustworthy, and acting with integrity such trust is fragile and context-dependent, making the sustained building of credibility, supportive networks, and communities of practice a continuing challenge for effective public health policy engagement (Sykes, Susie, et al. 2023; Cvitanovic, C., et al. 2021).

The integration of medicine and public health policy is central to advancing the 2030 Agenda for Sustainable Development, particularly SDG 3, which seeks universal health coverage (UHC), reduced premature mortality from communicable and non-communicable diseases, and improved health. Integrative care models offer cost-effective and accessible healthcare, supporting UHC in resource-limited settings, while emphasizing lifestyle interventions that prevent NCDs, directly contributing to SDG 3.4. Health is inherently cross-cutting, linking to other goals such as SDG 6 (Clean Water and Sanitation) through WASH initiatives, and SDG 1 (No Poverty), SDG 2 (Zero Hunger), and SDG 4 (Quality Education) by addressing social determinants of health. Achieving these goals further requires SDG 17 (Partnerships),

highlighting the importance of collaboration among governments, international organizations, NGOs, and the private sector to ensure sustainable, coordinated progress (Ferrando, Maria Regina, et al.2025; Naveen Prakash Kandwal, et al.2024).

7. Conclusion

Indian Knowledge Systems and the Path toward Sustainable Development

India's traditional knowledge systems support sustainable livelihoods through practices such as organic farming, animal husbandry, handloom weaving, handicrafts, and small-scale cottage industries, which are environmentally friendly and economically empowering. Promoting these traditional practices can generate employment, strengthen rural and pastoral communities, and help reduce poverty. According to Sheikh M.M. (2024), Indian Knowledge Systems, grounded in centuries-old wisdom, promote holistic living, environmental harmony, and the responsible use of resources. These principles provide valuable insights for tackling modern challenges, including climate change, ecological degradation, and social inequalities, thereby supporting sustainable development.

Indian traditional knowledge promotes a holistic and ecological worldview that emphasizes harmony between humans and nature, as reflected in ancient texts, sustainable agricultural practices, and indigenous water conservation systems such as Vrikshayurveda, stepwells, tanks, and kunds. Traditional medicinal systems like Ayurveda, Siddha, and Unani focus on preventive and holistic well-being through plant-based remedies, supporting biodiversity and reducing reliance on environmentally harmful chemicals, while ethical principles such as Dharma, Vasudhaiva Kutumbakam, and Ahimsa reinforce sustainability, global responsibility, and non-violence toward all living beings. Indigenous communities, particularly Adivasis, contribute generations-old ecological knowledge through practices like sacred groves and sustainable land use, and traditions of minimalism, circular economy, spiritual reverence for nature, and community-based cooperation further strengthen biodiversity conservation, social equity, and sustainable development. Together, these elements of the Indian Knowledge System offer valuable guidance for modern sustainable development by balancing human well-being with nature, and integrating this ancient wisdom with contemporary science can support effective resource management, economic value creation, environmental protection, and meaningful contributions to global sustainability efforts.

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