# 21. Sustainable Wellbeing and Its Correlation to Physiotherapy

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#### Abstract:

Background: Physiotherapy is one of the most developing fields in healthcare sector and its impact has been gradually noticed to be proliferating with time. In the recent advancements of physiotherapy, it has expanded its wings to the horizons of environmental sustainability.

Objective: The main motive is to understand the basic role of a physiotherapist to maintain the sustainable well-being of individuals in a long run.

Discussion: Through ages, there has been a deep link between environment and health. But, somewhere in the era of modern development, industrialization has impacted the health of men to a large extent, and the intensity is expanding with days. As modern-day physiotherapy utilizes a minimum of electrical equipment and machineries for investigations, diagnosis and treatment for proper health, hence, its role in being a unique reserve in healthcare systems should be noted and highlighted.

Conclusion: Based on this structure, this chapter presents a thorough understanding of environmental health depending on ecological realization and the linked aspects of physiotherapy practice to achieve the overall well-being of individuals.

## Keywords:

Physiotherapy; Environment; Sustainable.

#### 21.1 Introduction:

Sustainable well-being is a matter of substantial significance in today's ever-changing environment. The human life on earth has been facing unparalleled global environmental catastrophe probably like never before. Factors like pollution, contamination, climate change, urbanization, industrialization, reduction of forest coverage, global warming, rising population have been drastically impacting the environment at large and the dwelling human habitat. The demolition of our comprehensive natural abode has been detected as an enormous threat to human and animal life. But, mercifully there has been generalised awareness regarding this imminent quandary and thereby, actions and discussions have been raised in national and international platforms (United Nations Environment Program, 2018).

In the context of the documented and well-established interconnection between health and environment, personnel from various organizations and departments, as well as, individuals from multiple sectors of the society have come forward to think and execute possible solutions for the environmental degradation leading to affect human health on priority basis. The United Nations has taken grip over this concerning matter since its inception and the actions required in all levels have been distinctly stated in the UN Agenda 2030 Sustainable Developmental Goals (SDGs) precise call for the 'mobilisation of all available resources, participation of all countries, all stakeholders and all people' (United Nations, 2015). To follow up with this consideration by the United Nations, healthcare sector and its professionals obtains the responsibility of contributing towards the planetary health. With the development of healthcare, there is greater utilization of sophisticated technology, larger quantity of natural resources and more advanced machineries which results in further depletion of the environment and worsening human health. There are several studies which showcases the adverse effects of the emerging healthcare sector on nature and a latest study from US in 2013 stated that the health industry was 'responsible for significant fractions of national air pollution emissions and impacts, including acid rain (12%), greenhouse gas emissions (10%), smog formation (10%), criteria air pollutants (9%), stratospheric ozone depletion (1%), and carcinogenic and non-carcinogenic air toxins (1-2%)' (Eckelman & Sherman, 2016).

In the recent years, physiotherapy has evolved as an integral contributor to the health industry. Physiotherapy as described by World Physiotherapy is a health care profession concerned with human function and movement and maximising physical potential. It is concerned with identifying and maximising quality of life and movement potential within the spheres of promotion, prevention, treatment/intervention, habilitation and rehabilitation (WCPT, n.d.). To the call of maintaining global health and conventional well-being through protection of environmental resources, physiotherapy has also eventually spread its arena to sustainability. Step by step, physiotherapists around the globe have become aware about environmental protection and have lend their hands and services forwards towards the achievement of a healthy world and thereby tending to contribute to sustainable well-being.

## 21.2 Objective and Discussion:

The main objective is to understand the prime roles and responsibilities of the physiotherapy profession in order to establish the sustainable well-being of human life. Over the course of time, physiotherapy has somewhere lost its connection with nature; although the term 'Physiotherapy' derives from two Greek words – 'phusis' meaning nature and 'therapy' which means healing (Etymology Online, n.d.). Physiotherapy is a study which has its roots directly from the nature and movement-based biophysical approaches and methodologies and therefore, physiotherapy and physiotherapists should aim more in the up-gradation and retention of a natural environment. In the aspect of building a healthy ecosystem, physiotherapy has expanded its reach to exploration and management of natural resources such as in animal physiotherapy, equine-facilitated physiotherapy, environmental physiotherapy and more to go on. The key aim of environmental physiotherapy is to investigate and explore the issues of environment, its present status and impact on human health. Environmental physiotherapists make effort to understand the linkage between environment, health and the treating physiotherapists. As a futuristic approach, there is need to research and inspect the concepts and advancements of environmental physiotherapy.

Physiotherapists should develop their knowledge in theoretical, practical and research-based structures to realise and recognise the need of environmental sustainability. Environmental physiotherapy should enable to amalgamate the notions and beliefs of environmental core principles, nature, traditional way of life and modern-day physiotherapy practice.

Physiotherapists should now make moves to identify the global environmental crisis and implement nature amiable therapy into their practice and profession. Physiotherapy as a profession should put emphasis on low-tech, hands-on and eco-friendlier treatment for their patients, which may enhance the independency in Activities of Daily Living (ADLs) and thereby, Quality of Life (QoL). It is a well-known fact that modern day physiotherapy is one of the most environment friendly health sciences wherein, there is reduced usage of non-recyclable and non-reusable products, production of least wastes and disposal of wastes correctly in proper and different recyclable bins, amendment in the use of video conferencing consultation methods & above all reduction in the consumption of electricity in physiotherapy set-ups by focusing and handling more through manual treatment methodologies.

Centre for Sustainable Healthcare has presented a model proposing a perspective of the value of healthcare, which states that the value of care is more than just treatment outcomes in relation to financial costs.

Value = Outcomes for patients and populations/Environmental + Social + financial impacts (the "triple bottom line") (Mortimer et al., 2018).

According to this equation, all the dimensions, viz., environmental, social and financial must be acknowledged in a holistic manner for a sustainable development.

Mentioning about the environmental dimension of healthcare, there are aspects like carbon footprint, comparison of telemedicine and hospital/clinic visits or providing dialysis at home set up versus at a clinical set up, consumption of pharmacological products and so on, where there is lack of research and evaluation. Carbon footprint is one of the most vital factors to impact on greenhouse effect and thereby, environmental depletion. But, to date, the estimation of carbon footprint from the physiotherapy clinics and rehabilitation centres have not been executed or documented. In the context of comparison of telemedicine and hospital/clinic visits or providing dialysis at home set up versus at a clinical set up, there are only a few examples of research work stating the effects on sustainable environment (Masino et al., 2010; Connor et al., 2011). Eventually, there has not been much study stating the effect of Tele-based Physiotherapy or comparison of physiotherapy sessions at home versus clinic and their possible influence on global environmental needs. As far as the utilization of pharmacological products and its adverse effect on environment is concerned. 'by reducing and delaying the need for pharmacotherapy for mild to moderate musculoskeletal pain, physiotherapy presents an important sustainable healthcare solution (Banerjee & Maric, 2021).' Nevertheless, physiotherapy and its various treatment methods does not only provide positive effect on the health of the individuals, but if researched well, shall also have a broader perspective on societal, financial and most importantly, as the need of the hour, on the environmental outlook.

However, to inculcate the mentioned positive aspects of physiotherapy and to have its effect on the overall sustainable development, there is increasing knowledge demand on physiotherapists. 194 countries of the United Nations General Assembly on 25 September 2015, adopted the 2030 Development Agenda - 'Transforming our world: The 2030 agenda for Sustainable Development' consisting of 17 goals (United Nations 2015) (Narain & Mathye, 2019), wherein, the third Sustainable Development Goal (SDG) is 'Ensure healthy lives and promote well-being for all at all ages'. To achieve the target of SDG Goal 3, the goal should be well understood on time that sundry, innovative and revolutionary alterations are needed to cope up with the ever changing environmental and health affairs. Physiotherapy has a vital role to play in maintaining sustainable well-being and serve on the process to achieve SDG 3, although the connection between physiotherapy and SDGs needs to be well understood, assessed and further documented.

#### 21.3 Conclusion:

The local, regional, national and international bodies and other organizations should enhance their existing perception and policies and thereby, make changes in the field of physiotherapy for its contribution to a sustainable healthy environment. The bodies should also have inter-disciplinary and multi-disciplinary collaborations for providing platforms with the aim to make physiotherapists aware about their work's effects on planetary health. It has been found that a few top Physiotherapy Societies and Associations around the world like the Chartered Society of Physiotherapy (CSP), UK and American Physical Therapy Association (APTA) has started supporting environmental stewardship for a better environmental sustainability (Mortimer et al., 2018; APTA, 2020).

The WHO Global Action Plan for Physical Activity 2018-2030 stresses on the fact that steps taken to encourage physical activity can furnish to achieving no less than 13 of the 17 SDGs. Thereby, sustainable well-being through physiotherapy can be achieved, as physiotherapists are experts in encouraging physical activity, improving self-care and nurturing better lifestyle for people of all ages. Thus, physiotherapists have a valuable role in aiding and carrying up the development agenda for 'Transforming our world: the 2030 Agenda for Sustainable Development'. It can be hence concluded that, there is an inseparable deep correlation between sustainable well-being and physiotherapy. Therefore, consider physiotherapy practice and physiotherapists must the factor "sustainability/sustainable development" for an overall amelioration of environment.

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