International Journal of Healthcare Education and Medical Informatics
Volume 9, Issue 3&4 - 2022, Pg. No. 29-31
Peer Reviewed & Open Access Journal

Perspective

Sustainable Healthcare and Physiotherapy

Kalpana Zutshi[1], Aqsa Fatima[2]

[1]Associate Professor, Department of Physiotherapy, Jamia Hamdard, New Delhi, India.
[2]BPT Intern department of Physiotherapy Jamia Hamdard, New Delhi, India.
DOI: https://doi.org/10.24321/2455.9199.202209

I N F O

Corresponding Author:
Kalpana Zutshi, Department of Physiotherapy, Jamia Hamdard, New Delhi, India.
E-mail Id:
zutshi.kalpana@gmail.com
Orcid Id:
https://orcid.org/0000-0002-3494-5665
How to cite this article:
Zutshi K, Fatima A. Sustainable Healthcare and Physiotherapy. Int J HealthCare Edu & Med Inform. 2022; 9(3&4): 29-31.

Date of Submission: 2022-11-02
Date of Acceptance: 2022-12-20

World Health Organization (WHO) defines a Sustainable Healthcare System as one that benefits patients, Population, and the environment by addressing the socio-economic determinants of public health, intervening as early as possible in the disease process, providing 'lean' healthcare pathways, and reducing the environmental and socio-economic costs of healthcare provision.[1] According to WHO (2016), health is a contributor to several of the Sustainable Development Goals (SDGs), but health priorities for sustainable development will remain aspirational unless strategies to transform the health workforce capability are put in place.[2]

Among the various SDGs, the third goal, "Ensure healthy lives and promote well-being for all ages," the fourth goal, "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all," and the fifth goal, "Achieve gender equality and empower all women and girls," are all areas where physiotherapists may have a significant impact.[3] While physiotherapy's impact on the healthcare system as a whole is subtle, it is substantial because of the non-pharmacological, low-cost, and low-carbon treatments it employs to equip patients for self-management. Therefore, physiotherapy may play a significant role in promoting long-term sustainability.[4]

Over the past decade, the concept of sustainability in healthcare has acquired significant traction. This is due to the fact that leaders in the medical community have begun to acknowledge the negative consequences of standard procedures on global health.[5] When it comes to safeguarding health, treating patients, and saving lives, health sector facilities are the operational heart of service delivery. However, healthcare institutions also contribute to global warming through their carbon emissions.[6] Carbon monoxide is produced in large quantities by the world's healthcare facilities due to the extensive use of resources and the usage of energy-intensive machinery. Given that our professional motto as doctors is "first, do no harm," this seems odd. Medical facilities should be at the forefront of illness prevention efforts, and should not be the ones spreading it.[6] The annual carbon dioxide equivalent emissions from 514 coal-fired power plants are comparable to the global climate footprint of healthcare, which is 2 gigatons. If the healthcare sector were a country, it would be the sixth largest emitter of greenhouse gases.[6]

It is evident that the actions of a healthcare system exert considerable pressure on the environment. High consumption of resources like water and energy, as well as the production of both hazardous and regular trash, are all contributing factors.[7] As a result, it is important to have a discussion among all relevant parties about carbon emissions, carbon footprints, and their effects on the environment as a whole. Researchers and innovators have been hard at work spreading the word and developing plans for how healthcare might mitigate and adapt to climate change.[5] There is a once-in-a-generation chance to safeguard the health of patients, Population, and the planet by lowering the health system's carbon footprint and making it more resilient to the negative effects of a warming climate.[1]

Prioritising sustainability in physiotherapy, with science-based targets, will not only unleash potentially transformative solutions now but will deliver strong, resilient health systems for all, in the long term.[8] In developing countries like India, due to various social and economic reasons, it becomes essential for educational and institutional standards to give importance to SDGs. This is given the impact of the population at large in a particular geographical locale.

Universities, as institutions that focus on teaching, research, and community service, have a unique opportunity to promote sustainability and should serve as a model for other businesses. Organisations can assess and publicly report their environmental impact with the use of the Carbon Footprint (CF), a powerful decision-making tool.[9] The term "Carbon footprint" (CF) was created in the 1990s; it is derived from the concept of "ecological footprint," but instead focuses on quantifying the effects of climate change. The purpose of calculating a carbon footprint is twofold: first, to quantify greenhouse gas (GHG) emissions; and second, to manage and minimise those emissions. When the carbon footprint is broken down into its components, it becomes easier to spot the problem areas where emissions are particularly high and where improvements might be made. As a result, the carbon footprint is a measure of sustainable progress.[10]

Physiotherapy has been recognised as an essential component of the healthcare system, but at the same time, it is an integral part of social development on a large scale. There are strategies and implements to achieve this. By adopting a uniform approach to their profession, physiotherapists may significantly impact health outcomes and advance SDGs.

Furthermore, CF is a valuable tool which helps in decision-making that gives organisations, such as universities, considerable control over their activities that impact the environment,[11] and gives a number that may be used as a benchmark against which the campus environmental impact can be measured and against which the success of future mitigation initiatives can be assessed.[12] Therefore, it is evident that colleges and universities should determine and share their CF. They need emission-source-specific equipment for this purpose.[9] It is important to highlight, explore, and analyse the relationships between physiotherapy and SDGs in order to discover the benefits of physiotherapy for sustainable development.[4] In the words of the Environmental Physiotherapy Agenda (EPT Agenda 2023), "teaching students about sustainability in physiotherapy will at the very least create awareness among future clinicians," but it may also be the catalyst for a revolutionary notion that alters the practice of physiotherapy forever.[3]

Hence, focusing on these larger domains, the paper will discuss the significance of regulating best practises and putting sustainable healthcare practises into application, a strategy that the physiotherapy community can put into practise swiftly and economically to achieve net-zero emissions.[6]

Conflict of Interest: None

References

1. Palstam A, Sehdev S, Barna S, Andersson M, Liebenberg N. Sustainability in physiotherapy and rehabilitation. Orthopaed Trauma. 2022;36(5):279-83. [Google Scholar]
2. Narain S, Mathye D. Do physiotherapists have a role to play in the Sustainable Development Goals? A qualitative exploration. S Afr J Physiother. 2019;75(1):466. [PubMed] [Google Scholar]
3. Spencer J [Internet]. Physiotherapy and the Sustainable Development Goals – a students perspective; 2021 Mar 4. Available from: http://environmentalphysio.com/2021/03/04/physiotherapy-and-the-sustainable-development-goals-a-students-perspective/ [Google Scholar]
4. Palstam A, Andersson M, Lange E, Grenholm A. A call to include a perspective of sustainable development in physical therapy research. Phys Ther. 2021;101(3):pzaa228. [PubMed] [Google Scholar]
5. Syed H, Syed L, Stone A, Phadnis J. Supporting the sustainability agenda in healthcare. Orthopaed Trauma. 2022;36(5):284-90. [Google Scholar]
6. Karliner J, Slotterback S, Boyd AR, Ashby B, Steele K. Health care's climate footprint - how the health sector contributes to the global climate crisis and opportunities for action [Internet]. 2019 Available from: https://noharm-global.org/sites/default/files/documents-files/5961/HealthCaresClimateFootprint_092319.pdf
7. Trivitron Healthcare [Internet]. The importance of a sustainable healthcare system. 2016 Available from:

https://www.trivitron.com/blog/the-importance-of-a-sustainable-healthcare-system/
8. AstraZeneca [Internet]. Sustainability in healthcare: building a healthy future for people, society, and the planet. 22 September 2022 Available from: https://www.astrazeneca.com/what-science-can-do/topics/sustainability/driving-sustainability-in-healthcare.html"https://www.astrazeneca.com/what-science-can-do/topics/sustainability/driving-sustainability-in-healthcare.html
9. Valls-Val K, Bovea MD. Carbon footprint assessment tool for universities: CO2UNV. Sustain Prod Consump. 2022;29:791-804. [Google Scholar]
10. Radu AL, Scrieciu MA, Caracota DM. Carbon footprint analysis: towards a projects evaluation model for promoting sustainable development. Procedia Econ Finance. 2013;6:353-63. [Google Scholar]
11. Robinson OJ, Tewkesbury A, Kemp S, Williams ID. Towards a universal carbon footprint standard: a case study of carbon management at universities. J Clean Prod. 2018;172:4435-55. [Google Scholar]
12. Letete TC, Mungwe NW, Guma M, Marquard A. Carbon footprint of the University of Cape Town. J Energy S Afr. 2011;22(2):2-12. [Google Scholar]

ISSN: 2455-9199
DOI: https://doi.org/10.24321/2455.9199.202209