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A call for a new environmental physiotherapy - An editorial

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Unlike any other time in the history of humanity, today's world is marked by unprecedented environmental crises. Climate change, melting of polar ice caps, plastic waste polluting the oceans and other natural habitats are all pointing to mass species extinction (Intergovernmental Panel on Climate Change (IPCC), 2018; Mikanowski, 2017; Starr, 2016; World Wildlife Fund, 2018).

Fortunately, there is now broad societal awareness of these impending crises and people all around the world are exploring and implementing solutions to address these issues (Beer, 2018; Hawken, 2017; United Nations Environment Program, 2018). Central to these solutions is the need for us to think differently about how we are and live on this planet and share it with its other inhabitants.

Healthcare has been slow to think about its relation to and impact on the environment. Yet as healthcare becomes more technologically sophisticated, utilizes more and more natural resources, and generates increasing amounts of pollution, greater attention needs to be focused on offering a more environmentally conscious healthcare. Broadly speaking, what is at stake here, is to reconsider how healthcare might aid in the urgent need for improving planetary health, as well as how its significant negative environmental impacts might be reduced (Lancet, 2017; United Nations Environment Program, 2018).

A recent study from the US showed that in 2013 the health care sector 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 and Sherman, 2016). This suggests that healthcare may be having a bigger effect on climate change and ecological degradation than many people may have realised so far.

Part of the reason healthcare has such a poor environmental record can be found in the way dominant

Western biomedical discourses have traditionally seen humans as distinct from the environment and having dominion over it. Until recently, with the exception of public health, orthodox Western healthcare has paid little heed to people's lived experiences or social context, and focused almost exclusively on the body 'removed' from its particular environmental context.

This is quite different to alternative and complementary medicines and indigenous health practices, which have always seen a person's health as intimately connected to the health of the air, the rivers, the land and place. In recent years, more orthodox fields have begun to explore the therapeutic connections between people and environments, with new ventures like ecotherapy and adventure therapy growing out of psychotherapy, the use of 'nature' prescriptions by doctors, the exploration of outdoor recreation as a means of fostering public health, and the critical and empirical study of the relationship between environment, space, health, and disability becoming more prevalent in healthcare thinking and practice (Carell, 2018; Carpenter, 2013; Folkhälsomyndigheten – The Public Health Agency of Sweden, 2018; Jordan and Hinds, 2016; Møller, 2018; Reinhardt et al., 2011).

Over the course of its history, physiotherapy has maintained only loose explicit ties to the environment. Yet, as a therapy with a strong basis in 'natural' touch, as well as activity- and movement-based biophysical approaches to assessment and treatment, physiotherapy has much to offer a burgeoning environmental consciousness. More recent evidence for a relation between physiotherapy and the natural environment can be found, for example, in the ongoing exploration of animal physiotherapy (physiotherapy for animals), as well as physiotherapy with animals (e.g. equine-facilitated physiotherapy), and the recognition of problems arising from restrictions in participation in meaningful outdoor activities as a result of injury or lack of access to outdoor environments (Coen, Mitchell, Tillmann, and Gilliland, 2018; Sudmann, 2018).

But much more consideration needs to be given to the ways that physiotherapists can reduce some of the negative effects of healthcare on the environment, if not even enhance people's contribution to the health of the planet. Considering the additional urgency of doing so in light of the immense ecological challenges that humanity is facing today it seems high time we made a more conscious effort to reconsider the relationship between physiotherapy and the environment in all of its facets.

One significant move physiotherapists can make would be to identify physiotherapy as an environmentally-friendly healthcare practice. With its emphasis on low-tech, hands-on and interpersonal approach to therapy, physiotherapy can rightfully claim to be one of the more eco-friendly approaches to healthcare, within a field that is becoming increasingly dominated by the techno-sciences. Enhancing people's use of physiotherapy might also reduce the increasing dependence on resource intensive technologies like diagnostic imaging, medical screening and surgical repair.

But physiotherapists might also look at the environmental cost of their practices. How many non-renewable resources like paper clinical records and disposable products are physiotherapists using in their practice? How much electricity are we using to run our clinics and manage patient care electronically? How many technologically-dependent diagnostic procedures are we using in place of our traditional hands-on clinical skills in the course of our daily practice? These may be small as a contribution to the overall environmental cost of healthcare, but even reducing some of these costs might make an impact.

Further, transportation carries a major environmental cost and a service that is located in easy reach for its clients is both ideal for people with low incomes, and better for the planet. At the same time, we might reconsider how we justify long-haul air-travel for the purpose of teaching or attending courses, conferences, and other professional gatherings in an age where modern technologies can bring us together much faster and at potentially much lesser costs to the environment.

There are also questions about our clinical environments and their sterile separation from our natural ecosystems. How do we conceptualize and account for clients and therapists access to natural light and fresh air in and outside of our clinical environments? Why are our clinical environments mostly indoors and quite strictly separated from the outdoors? What is the reasoning behind this?

All of these are ways to gradually address and further explore how we want to respond to the environmental issues we are facing today as custodians of the planet (Maric, 2018). And there are also fundamental questions that need to be answered if we want to engage with such

thinking. We might begin by asking how it is that contemporary physiotherapy practice feels at odds with the environment? Furthermore, how do we understand the relation between health and environment in such a way that it is relevant to physiotherapy? What is the relation between body, function, movement and environment? What needs to be altered about physiotherapy's culture and identity to make the necessary connection with the environment and potentially even environmental activism? And what might be possible as a new field of scholarship for physiotherapy if it identifies a link with people working in planetary and public health, ecologists, environmental scientists and others in the field?

Thinking about questions like these may amount to a novel field for physiotherapy research, practice, and education. If this field of 'environmental physiotherapy' is nowhere to be found yet, but we have an interest in beginning its development and exploration, then we have to ask what it might entail, and how it might contribute to the health and wellbeing of all. We are inclined to think that there are some exciting possibilities here and look forward to how environmental physiotherapy might develop in the years to come.

Disclosure statement

No potential conflict of interest was reported by the authors.

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