


TRAVEL THERAPY: SIMPLE EXERCISE INTERVENTIONS FOR OSTEOPOROSIS PATIENTS

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Viewpoint
Received: 2.12.2024.
Accepted: 8.12.2024.
<https://doi.org/10.20867/thm.31.1.15>

Interest in the emergent interdisciplinary concept of travel therapy is growing, especially its applications in the context of the world's aging populations. Travel therapy is defined as “a therapeutic approach that enhances people’s physical and psychological health and wellbeing through positive travel engagement and experiences” (Wen et al., 2022a). “Prescribing travel in the manner of exercise prescription as part of a lifestyle medicine programme” can for example benefit older adults with a number of health conditions (Flaherty et al., 2024). In particular, those with musculoskeletal disorders can benefit from such non-pharmacological interventions. Consequently, investigating how tourism and health practices can combine to benefit vulnerable populations with specific health conditions warrants further academic attention so that we can gain vital insights into how tourism-based health services can be developed (Wen, 2024).

Following mental health conditions, musculoskeletal disorders are now the second leading cause of disability globally, affecting approximately 1.5 billion individuals. Their prevalence continues to rise in response to economic development and accelerating population aging (Compston et al., 2019; Gill et al., 2023). Among these disorders, osteoporosis stands as the most prevalent, ranking as the fourth most common chronic condition worldwide. Osteoporosis, which the WHO has classified as one of the major contributors to the global disease burden, is characterized by reduced bone mass and deterioration of bone microarchitecture, resulting in decreased bone density (Gill et al., 2023). Due to its often asymptomatic progression, osteoporosis is difficult to detect prior to fracture, earning it the label “silent killer”.

Hip fractures are particularly severe outcomes of osteoporosis, with about 20% of patients dying within six months of fracture and 50% requiring long-term care (Gill et al., 2023). Treatment for hip fractures also constitutes over 70% of all fracture-related healthcare costs (Wiktorowicz et al., 2001). In 2019, the global incidence of hip fractures was estimated to exceed 14 million cases, resulting in a disease burden of approximately 2.9 million years lived with disability (YLD) (Dong et al., 2023). Previous projections indicated that this number may rise to 4.5 million annually by 2050 (Cauley et al., 2014). The high incidence of hip fractures resulting from osteoporosis highlights the necessity for routine, large-scale screening and effective interventions to prevent and manage fractures (Gill et al., 2023; Saito et al., 2017). Nevertheless, implementing appropriate preventive and therapeutic measures can markedly reduce fracture rates, alleviating patient suffering, decreasing the disease burden, and lowering financial costs associated with surgical interventions, hospitalization, and prolonged rehabilitation (Reid & Billington, 2022). Thus, efforts to address osteoporosis have significant implications for public health, economic, and socioeconomic outcomes.

Previous studies indicated that aging is associated with progressive loss of musculoskeletal performance and identified the role of simple/basic exercise in prevention and interventions, thus demonstrating that such measures are of significant benefit for patients with osteoporosis (Genest et al., 2021; Hoffmann et al., 2023; Lyu et al., 2024; Otero et al., 2017). In a similar vein, recent, novel interdisciplinary research proposed tourism as a possible cost-effective non-pharmacological intervention for

individuals with dementia, and it is now well-recognized in the literature that exercise is one intervention that has an effect on brain function (Wen et al., 2022b). Through the lens of travel therapy, health and tourism researchers are increasingly exploring travel therapy as an alternative medical intervention option that can enhance both physical and psychological wellbeing for individuals with a range of health conditions and ways in which traveling in search of health benefits can offer therapies in a unique context that differs from people's daily routine and familiar living environments (Hu et al., 2024a).

In the case of patients with osteoporosis, applying exercise as an intervention is not always easy, as physiological and psychological factors such as pain and kinesiophobia prevent patients from participating in exercise (Lyu et al., 2024). However, in these circumstances, considering tourism as a unique therapy holds significant potential, as it can play a vital role in both the prevention and therapeutic management of osteoporosis. Specifically, using global aging as a context, engaging in travel promotes physical activity and fosters healthy lifestyles among older adults because activities such as walking, hiking, and exploring new environments contribute to improved bone health. Additionally, positive travel experiences could serve as potential non-pharmacological interventions, offering opportunities for the relaxation and social interaction that are essential for overall well-being (Hu et al., 2024b). Therefore, given that the incidence of osteoporosis and related fractures among older adults is expected to rise significantly, there is an urgent need for innovative intervention strategies to effectively address the health challenges associated with an aging society (Reid, 2020).

This viewpoint hopes to introduce the idea of travel therapy more widely into the broader literatures on tourism and health as a potential cost-effective prevention and intervention option for individuals with health conditions such as osteoporosis. Traveling for therapeutical health reasons can not only enhance one's physical and psychological wellbeing but also add to one's quality of life in general, given the leisure-induced and positive experiences that travel can offer when the proper preparations and support required for vulnerable populations to safely engage in tourism have been fully considered and are in place. The next questions that therefore arise are: "Should we consider developing more specific tourism-based health services at certain health-oriented tourism destinations with particular attention to specific health conditions such as osteoporosis and dementia?" and "Are more interdisciplinary research collaborations into areas such as tourism and osteoporosis required to achieve this goal collectively?"

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Please cite this article as:

Wen, J., Hu, F. & Chai, Y. (2025). Travel Therapy: Simple Exercise Interventions for Osteoporosis Patients. *Tourism and Hospitality Management*, 31(1), 163-165, <https://doi.org/10.20867/thm.31.1.15>



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