ABSTRACT:

Healthcare is a major driver of greenhouse gas emissions and is closely intertwined with industrial processes responsible for air, water, and soil pollution. Chronic pain – particularly as it relates to spine and musculoskeletal diagnoses – comprises a significant portion of healthcare utilization and effects millions of people worldwide. Despite the prevalence of chronic spine and musculoskeletal pain, there has been limited discussion of the environmental impacts of outpatient clinic and interventional processes as they relate to these conditions. This narrative review explores the environmental impact related to diagnostics, pharmacologics, and common non-operative interventional procedures utilized in the management of patients with chronic musculoskeletal and spine pain. Topics explored include energy utilization, production and disposal of pharmaceuticals, and waste production from interventional procedures. This study aims to educate providers involved in spine and musculoskeletal disease management regarding the possible environmental consequences of their practices. The article also focuses on alternative approaches to patient care that are more sustainable as well as highlighting areas in need of further investigation.