I., 👿.

Musculoskeletal physiotherapy is a specialized branch of physical therapy focused on diagnosing, treating, and managing disorders of the musculoskeletal system. is system, comprising bones, joints, muscles, tendons, and ligaments, plays a crucial role in movement and daily functioning. When these components are compromised due to injury, disease, or aging, the resulting pain and disability can signi cantly impact an individual's quality of life. Musculoskeletal physiotherapy o ers a holistic approach to alleviating pain, restoring function, and enhancing overall well-being [1].

Musculoskeletal disorders (MSDs) are common and can a ect people of all ages. ey range from acute injuries, such as fractures and sprains, to chronic conditions like arthritis and back pain. ese disorders can be caused by various factors, including trauma, repetitive strain, poor posture, or degenerative diseases. Symptoms o en include pain, sti ness, swelling, and reduced mobility, which can hinder daily activities and work performance [2].

- E : As people age, they may experience musculoskeletal degeneration. Physiotherapy helps in managing conditions like osteoarthritis, improving mobility and maintaining independence.
- P...: Physiotherapy is critical in the post-operative recovery process, helping patients regain strength, mobility and function [6].
- C · : Pediatric physiotherapy addresses musculoskeletal issues in children, such as developmental delays, congenital conditions and sports injuries.



Advancements in technology and research continually enhance the eld of musculoskeletal physiotherapy [7]. Emerging techniques and tools, such as virtual reality for pain management, telehealth for remote consultations, and advanced imaging for precise diagnosis, are transforming patient care. Ongoing research into biomechanics, pain science, and rehabilitation methods continues to improve treatment outcomes and patient experiences [8].



Musculoskeletal physiotherapy is a dynamic and essential eld dedicated to the health and well-being of the musculoskeletal system. rough a combination of assessment, pain management, rehabilitation, and education, physiotherapists provide comprehensive care that addresses both the symptoms and underlying causes of musculoskeletal disorders. As our understanding of these conditions evolves, the role of musculoskeletal physiotherapy continues to expand, o ering new hope and improved outcomes for countless individuals worldwide. Whether recovering from an injury or managing a chronic condition, patients can rely on the expertise of musculoskeletal physiotherapists to guide

them on the path to recovery and optimal health.

A Aw . None

None

References

- Olivero OA, Anderson LM, Diwan BA, Haines DC, Harbaugh SW, et al. (1997) Transplacental efects of 3'-azido-2',3'-dideoxythymidine (azt): Tumorigenicity in mice and genotoxicity in mice and monkeys. J Natl Cancer Inst 89: 1602-1608
- Poirier MC, Olivero OA, Walker DM, Walker VE (2004) Perinatal genotoxicity and carcinogenicity of anti-retroviral nucleoside analog drugs. Toxicol Appl Pharm 199: 151-161.
- Borojerdi JP, Ming J, Cooch C, Ward Y, Semino Mora C, et al. (2009) Centrosomal amplification and aneuploidy induced by the antiretroviral drug azt in hamster and human cells. Mutat Res 665: 67-74.
- Benhammou V, Warszawski J, Bellec S, Doz F, Andre N, et al. (2008) Incidence of cancer in children perinatally exposed to nucleoside reverse transcriptase inhibitors. AIDS 22: 2165-2177.
- Copeland WC (2012) Defects in mitochondrial DNA replication and human disease. Crit Rev Biochem Mol Biol 47: 64-74.
- Foster C, Lyall H (2008) Hiv and mitochondrial toxicity in children. J Antimicrob Chemother 61: 8-12.
- Poirier MC, Divi RL, AlHarthi L, Olivero OA, Nguyen V, et al. (2003) Long-term mitochondrial toxicity in hiv-uninfected infants born to hiv-infected mothers. J Acquir Immune Defc Syndr 33: 175-183.
- Heidari S, Mofenson LM, Bekker LG (2014) Realization of an aids-free generation: Ensuring sustainable treatment for children. JAMA 312: 339-340.