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ROLE OF PHYSIOTHERAPY IN MANAGEMENT OF MOTION SICKNESS: A SYSTEMATIC REVIEW.

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Background: Motion sickness is a multisensory disorder caused by conflict between visual, vestibular, and proprioceptive inputs, leading to symptoms such as nausea, dizziness, and disorientation. It can significantly impair travel tolerance and quality of life, especially in individuals exposed to virtual environments or frequent travel conditions. Pharmacological management is associated with side effects and limited long-term applicability.

Purpose: To systematically evaluate the effectiveness of physiotherapy interventions in managing motion sickness.

Methods and Materials: A literature search was conducted for studies published between 2000 and 2025 using PubMed, PEDro, Scopus, and Google Scholar. Interventional studies in English involving participants with motion sickness or VR-induced motion sickness were included. Studies not involving physiotherapy interventions and non-interventional designs were excluded. PRISMA guidelines were followed to ensure transparency and reproducibility of the review process.

Results: A total of 40 studies were identified, 7 studies met the inclusion criteria while 33 articles were excluded due to duplication or not meeting inclusion criteria. Gaze stability exercises (n=1), vestibular training (n=1), habituation with breathing (n=2), diaphragmatic breathing (n=1), optokinetic training (n=1), and combined balance therapy (n=1) were effective interventions. These interventions demonstrated reduction in motion sickness symptoms, improved balance, enhanced vestibulo-ocular interaction, and better autonomic regulation and sensory integration.

Conclusion: Physiotherapy interventions, including gaze stability, vestibular rehabilitation, habituation, and breathing techniques, consistently demonstrated improvement in motion sickness symptoms, postural control, and functional tolerance. Multimodal approaches showed additional benefits compared to single interventions. Physiotherapy is effective in the management of motion sickness, supporting symptom reduction, functional improvement, and providing a safe, non-pharmacological, and cost-effective treatment option.

Keywords: Motion sickness, Vestibular Rehabilitation, Gaze stability, Habituation, optokinetic training.