LETTER TO THE EDITOR OPEN ACCESS

# Significance of Physiotherapy Management in Vestibular Disorders

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Vestibular system is important in the detection of head position in space as well as with reference to gravity hence ensuring gaze stabilization, posture control, upright stability, spatial orientation and navigation. The inner ear sends sensory information to the central nervous system via the inner ear and is combined with the visual and somatosensory information. The imbalance of this process causes the appearance of the conflicting sensory signals that cause the emergence of the following symptoms dizziness, vertigo, nausea, headache, postural instability, and deterioration in functional performance. Chronic vestibular impairment may greatly limit everyday functionality, lead to fatigue, as well as adversely impact the quality of life.[1] Among the elderly Vestibular dizziness and imbalance are frequent but poorly characterized clinical manifestations. The current epidemiology shows that vestibular dysfunction occurs in almost one-third of all patients above 60 years of age and the prevalence rates are higher than 50.[2, 3] where the etiology of the condition is multifactorial and may involve peripheral or central vestibular pathology, neuromuscular impairment, cardiovascular, medication-induced dizziness, or psychosocial causes. In spite of these complications, it is still vital to establish which system is predominant to provide proper management and prevent the needless investigations or a long period of using pharmacological therapy. Benign paroxysmal positional vertigo (BPPV) is one of the most commonly reported cases of vestibular disorder in older adults and is more common than peripheral and central vestibular hypofunction in patients with dizziness. [3] Correct classification of the causes of the disorder is therefore a key to successful clinical decision-making process. When medical diagnosis usually aims at identifying a pathology condition to guide the principal of pharmacological or surgical intervention, physiotherapy diagnosis aims at determining impairments, activity and participation limitations in order to select the best intervention strategy. Akin to Vestibular rehabilitation therapy, Vestibular Physiotherapy is an exercise-based therapy that was first proposed by Cawthorne and Cooksey in the 1940s. Since then it has been effective as demonstrated in many controlled trials, systematic reviews, and clinical practice guidelines, especially in the case of personnel with peripheral vestibular hypofunction.[4] Vestibular rehabilitation is able to alleviate dizziness, enhance balance and gaze stability, functional mobility, and assist a patient with peripheral vestibular hypofunction to resume daily activities through central adaptation, habituation, substitution, and compensation mechanisms. The pharmacological treatment of the symptoms of vestibular disorders mainly inhibits the vestibular functions and could provide temporary alleviation of the symptoms. But continued use of the vestibular suppressants may disrupt central compensation, and may result in the sedative effect that is restrictive to functional recovery and vestibular activity in rehabilitation.[4-6] Vestibular rehabilitation is not extensively used in Pakistan, despite the high evidence of its effectiveness. There are few rehabilitation facilities offering organized services of vestibular rehabilitation and standardized assessment and treatment regimens are mostly unavailable. Moreover, certified training programs on vestibular rehabilitation are not available to everyone, which limits the capacity of physiotherapists to acquire evidence-based management of the vestibular system in the scope of their clinical activities. One of the significant factors is having less knowledge of physiotherapy in the management of the vestibular disorders among health care professionals such as physicians and allied health practitioners. This has resulted in a high number of patients being kept on an extended course of pharmacological care without any rehabilitation and thus, slow recovery and remain disabled. It is thus highly encouraged that the principles of vestibular assessment and rehabilitation be incorporated into the undergraduate and postgraduate medical and allied health curricula. Also, evidence-based clinical practice guidelines, formulated locally and applicable in the local context, would prove beneficial in the support of standardized and effective care. Education campaigns also need to be enhanced in order to create a better understanding of the vestibular disorder and non-pharmacological treatment. Timely intervention, lessening the symptom chronicity, positive functional outcome, and overall quality of life can be achieved through the early identification and referral to the vestibular rehabilitation. With the growing number of elderly people and the rising rate of vestibular dysfunction the strengthening of vestibular rehabilitation services must be regarded as a priority in the field of rehabilitation

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practice in Pakistan. Conclusively, vestibular rehabilitation through physiotherapy is an evidence-based, safe, and effective intervention in a broad variety of disorders of the vestibular apparatus. Sealed lapses in professional education, availability of services and awareness should be addressed in an attempt to maximize patient outcomes and enhance quality of life among individuals suffering dizziness and balance problems.

**Conflict of Interest**
None to declare

**Author's Contribution**
IH contributed to the conception and design of the study. Manuscript drafting and critical revision were undertaken by all authors. All authors approved the final manuscript.

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