## conferenceseries.com

5<sup>th</sup> International Conference on

## PHYSIOTHERAPY Neuromber 27

November 27-29, 2017 Dubai, UAE

## Effects of virtual reality on balance and postural control in people with multiple sclerosis: A systematic review

## Mahsa Seydi and Mahyar Salavati

University of Social Welfare and Rehabilitation Sciences, Iran

**Introduction:** Multiple sclerosis (MS) has been shown to be associated with a wide variety of sensory and motor dysfunctions, resulting in symptoms originating from sensory, motor and cognitive impairments. Balance and mobility disorders are common life-threatening complications in patients with MS. The methods used in the rehabilitation of these patients require different physical therapy exercises and trainings. Virtual reality-based trainings provide MS patients repetitive practice, feedback and motivation which have been claimed to improve visual, auditory, tactile input and motor learning.

**Objective:** The purpose of this study was to investigate the results shown in previous studies on the effects of virtual reality on balance and postural control in people with MS.

**Methods:** Relevant literature in PubMed and Google Scholar were searched between 2000 and 2017. The keywords included the terms multiple sclerosis, virtual reality and balance. Only randomized control trial articles were considered in this review.

**Results:** After the duplicates were removed, we evaluated the title and abstract of each of the articles with the study inclusion criteria. From these, 23 articles were excluded based on the title and abstract. Finally, 11 articles were considered as included studies.

**Conclusion:** Balance training based on virtual reality gaming could be an effective method for patients with MS. Additional search is needed to support the rehabilitation protocol with virtual reality and to solve their limitations and increase the effect of treatment.

Notes: