EDITORIAL

Forward Technological Shift in Rehabilitation

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ABSTRACT

The utilization of exergaming has recently gain extraordinary importance in health care system for rehabilitation. The growing use of gaming technology and the development of different software's by the ground-breaking minds in the gaming market have unintentionally opened new avenues to address the aims of rehabilitation. The applications of gaming technology are limitless. The authenticity of these devices as medical instrument is questionable and whether there is a need to approve these devices by governing bodies before using them. This issue should be highlighted keeping in mind the risks and adverse effects related to use of this exergames technology. The discussion on emergent technologies is quite significant in medical rehabilitation and physical therapy practice which needs to be highlighted.

Keywords: Exergaming, Rehabilitation, Technology

The utilization of exergaming has recently gain extraordinary importance in health care system for rehabilitation[1]. The growing use of gaming technology and the development of different software's by the ground-breaking minds in the gaming market have unintentionally opened new avenues to address the aims of rehabilitation. The common goals of rehabilitation are to improve balance, enhance functional movement and promote flexibility. The major reason for incorporating video games in rehabilitation is to enhance motivation,patient adherence to the treatment protocol and to avoid boring training.

But a question which arises in mind is that could those participants who are involved in rehabilitation through exergaming capitalize onthis entertainment value? Motivating an individual's interest is possibly a key to exercise adherence. The applications of gaming technology are limitless. A study was conducted to evaluate the efficacy of Wii Ninetedo in patients with Parkinson's disease and the role of incorporating exergaming for managing childhood obesity[2].Case studies utilizing gaming technology have been reported for improving balance and gait in stroke patients[3]. The use of exergames was found effective in improving exercise adherence in patients with Multiple Sclerosis[4].

The application of modernize equipment such as Wii console for rehabilitation is a debatable issue[5]. The authenticity of these devices as medical instrument is questionableand whether there is a need to approve these devices by governing bodies before using them. This issue should be highlighted keeping in mind the risks and adverse effects related to use of this exergames technology. Numerous case studies of injuries have been reported associated with utilization of gaming technology such as shoulder joint dislocations, pulmonary condition, tendon and ligamentous rupture[6].

Around the globe utilization of this new technology has been adopted and many international researchers showed keen interest in incorporating the use of exergaming for rehabilitation. A global attention has been directed to this technology and paper based work was presented in World Confederation for Physical Therapy.

The discussion on emergent technologies is quite significant in medical rehabilitation and physical therapy practice which needs to be highlighted. This advancing technology and use of other similar devices provide infinite options for rehabilitation ranging from heart rate and respiratory rate monitoring devices, to diagnostic and education applications.(7)Identifying the importance of such devices, it seems impossible to predict the effect and influence of this emergent technology in rehabilitation fields.

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