Journal of Diabetes Science and Technology
Volume 5, Issue 2, March 2011

SYMPOSIUM

Using Virtual Reality to Improve Walking Post-Stroke: Translation to Individuals with Diabetes

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Abstract

Use of virtual reality (VR) technology to improve walking for people post-stroke has been studied for its clinical application since 2004. The hardware and software used to create these systems has varied but has predominantly been constituted by projected environments with users walking on treadmills. Transfer of training from the virtual environment to real-world walking has modest but positive research support. Translation of the research findings to clinical practice has been hampered by commercial availability and costs of the VR systems. Suggestions for how the work for individuals post-stroke might be applied and adapted for individuals with diabetes and other impaired ambulatory conditions include involvement of the target user groups (both practitioners and clients) early in the design and integration of activity and education into the systems.

J Diabetes Sci Technol 2011;5(2):309-314

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Abbreviations: (PAD) peripheral artery disease, (VE) virtual environment, (VR) virtual reality

Keywords: fitness, interactive video gaming, mobility, motor control, stroke, virtual reality

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