

Video Game Therapy for Apoplexy Patients

Azaria Mitchell, Keayon Lawson, and Shakeer Franklin

UMB CURE Scholars Program - Sixth Grade, Eighth Grade, Green Street Academy, Franklin Square Elementary/Middle School, Baltimore, MD
Marlene and Stewart Greenebaum Cancer Center, University of Maryland, Baltimore

Purpose of Study

Our research is about video game therapy for stroke patients and how it can help them because who knew that video games cannot only be fun but can be medicine for some. This topic is mainly about how people can be helped and how strokes can be helped by video game therapy.

Introduction

Every year approximately 795,000 Americans suffer a stroke, but the majority survive. This is the reason why strokes are the leaders in long-term disabilities. The oldest research of strokes dates back to ancient Greece. Although research on this topic has been going on for centuries the traditional methods such as, muscle exercises haven't decreased the disability rate amongst people who experience strokes. This is why people have begun to turn toward other methods such as video game therapy.

What is Apoplexy

Apoplexy is an unconsciousness or incapacity resulting from a cerebral hemorrhage or a stroke. A side effect from having Apoplexy is not being able to speak because of being angry or frustrated. Some symptoms of Apoplexy is vision loss or eyes that become weak, severe headaches, low blood pressure which can cause to fainting, and nausea.

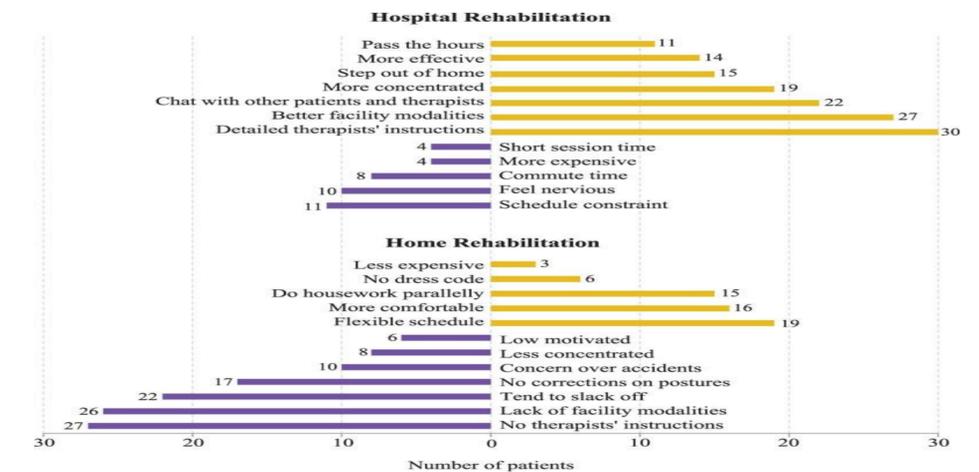
Discoveries and Innovations

According to research in order for video games to actually help stroke patients the video games have to require a specific thinking or muscle skills that can help simulate new connections between different parts of the brain. The originator of this discovery is Hedi Moawad, MD. Games for stroke recovery needs to have things like creative thinking problem solving, or muscle movement. It also needs to have different difficulty levels and feedback so they can know what they're doing good or if they're improving and it has to make them actually want to play it and be exciting. These discoveries were made on August 11, 2015.

Real World Applications

Throughout the world there are numerous accounts where people have apoplexy or strokes. This may occur to elderly people because of having too much blood on one side of the brain. Over 27,000 people suffer from apoplexy, which is very dangerous and now people know that video games like Wii could actually help them rehabilitate their body parts that they might have no control of.

Data



<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4839901/figure/F1/>

Conclusion

To conclude we feel as if video games are a good way to assist stroke patients with recovery. We have proven this by providing sound evidence to support our claim from discoveries to data. If needed, this research could be used in a study.

References

<http://www.strokecenter.org/patients/about-stroke/stroke-statistics/>
<https://www.flintrehab.com/2015/video-game-therapy-for-stroke-recovery/>
https://www.hopkinsmedicine.org/healthlibrary/conditions/nervous_system_disorders/history_of_stroke_85,P00223