**Journal Club November**

**AOCPMR**

**Discussion by: Alec Curtis, OMSII at Kansas City University of Medicine and Biosciences**

**Effectiveness of Exergaming Training in Reducing Risk and Incidence of Falls in Frail Older Adults With a History of Falls**

Discussion:

Falls are the second leading cause of accidental death worldwide, especially those over 65. The simple fear of falling can be debilitating to one’s confidence and limit their daily activities. The following study conducted by Fu et al. 2015 determined the effectiveness of exergaming training via a Wii Fit board in adults over 65. The article was originally published in the Archives of Physical Medicine and Rehabilitation. The article was accessed on Clinical Key.

This study was a single-blinded randomized control trial. The researchers chose 60 nursing home participants which were assessed using the Functional Ambulation Category at grade 2 or 3. All had at least one fall in the past year.  The control group received conventional balance training while the intervention group received Wii Fit balance training, both over a 6 week period with assessment over 12 months.

The nursing staff measured fall incidence and risk over the 12 month period after randomization. The fall risk was determined using the short-form Physiological Profile Assessment (PPA) assessing 5 measures of physiological function.

The researches determined Wii Fit Balance training reduces falls by 69% as compared with conventional training and improves fall risk by 35%, significantly higher than the 11% with conventional balance training.

In conclusion, Wii Fit balance training is significantly more useful at reducing fall risk, and fall incidence in the elderly population than conventional balance training.

Discussion Questions:

1. Is Wii Fit balance training more effective due to the different mental stimulation or the specific physical movements?
2. How can the Wii Fit training be implemented into every nursing home, is it practical?
3. Could the use of Wii Fit training decrease mental decline?
4. What other devices can be used to gamify exercising?
5. What ideas do you have to implement this training in different settings other than a nursing home? What about a hospital or a home?
6. What other conventional rehabilitation programs can be gamified?
7. What is the role of the physiatrist in the setting of gamifying exercise?
8. What are some potentially negative consequences to using a Wii Fit board as opposed to conventional balance training?