

2024 American Hippotherapy Association 10th Biennial International Conference

Poster Presentations

March 7th, 2024

6 pm - 7 pm

Poster # 1

Using a Mechanical Horse as an Adjunct to Equine-Assisted Therapies
(Case studies of the effect of a mechanical horse as an equine therapy tool.)

Dawn Miller, OTR/L

This poster will show several case studies of children who have benefitted from using a 3-D mechanical horse, the MiraColt™. Examples of how using the mechanical horse as a transitional component of equine therapy can promote the benefits of equine movement if physical or emotional limitations prevent riding an actual horse.

Poster Objectives:

- Participants will gain an understanding of how the mechanical horse can be an adjunct to using a real horse for equine movement benefits.
- Participants will learn ways to utilize the movement of a mechanical horse to gain mobility and increase opportunity for actual horse riding.
- Participants will understand the benefit of using a mechanical horse with access to a child's trunk, hips and pelvis can influence the ability to achieve ride-ability.
- Participants will see the effects of horse movements by utilizing a mechanical horse on children less than 2 years of age.

Poster # 2

Evaluating the Effect of Equine Conformation on Rider Core Muscle Activation in Humans for Use in Hippotherapy

Vanessa Royal, Dr. Nathan Meier, and Dr. EunJeong Lee

This poster discusses that hippotherapy uses the movement of the horse as a treatment tool. Horses vary in their conformation and, therefore, their movement, yet there is a lack of research into how the physical attributes of the horse affect the muscle activation of riders. The purpose

of this research is to evaluate how horses with different conformations influence core muscle activation in able-bodied riders and to understand what factors are considered by therapeutic riding centers and physical therapists when selecting horses to use in treatments. The hypothesis was that draft horses would cause a lower amount of activation in the core muscles in able-bodied riders at the walk than non-draft horses. This is because draft horses are typically larger and slower with smoother gaits, which would likely result in lower muscle activity for a rider on a draft horse compared to a rider on a smaller, faster horse with bigger movement that would require more effort from the rider to stay centered on the horse.

Poster Objectives:

- Understand that no significant trends were seen between drafts and non-drafts
- Understand that significant differences were seen between individual horses
- Understand that when choosing a horse for a therapy session using HPOT, the temperament and horse's movement quality may both be important factors to consider for the specific needs of clients

Poster # 3

OT HIPPO THERAPY ONLINE VOLUNTEER EDUCATIONAL PROGRAM

Remeshwar Narain, OTD, OTR/L and Virginia E. Koenig, OTD,MSA, OTR/L

This poster explains that the goal of the study was to determine if volunteers at HorseAbility improved their understanding and knowledge of OT hippotherapy after participating in an OT Hippotherapy Online Educational Volunteer Program for six weeks. The study utilized a pre-test post-test research design. Quantitative analysis indicated that the OT Hippotherapy Online Educational Volunteer Program significantly increased participants' knowledge and understanding of OT hippotherapy services.

Poster Objectives:

- Understand that an online OT hippotherapy educational program for volunteers can significantly improve participants' understanding and knowledge of OT Hippotherapy Sessions and subsequently contribute to their health and wellness through volunteering.
- Explain that this program can contribute to volunteers' overall health identity and sense of competence as they become more knowledgeable about hippotherapy and their roles and responsibilities as OT hippotherapy team members.
- Understand that online volunteer educational programs, such as the one described in the article can improve volunteers' understanding of OT hippotherapy and the clients they serve. Ultimately, this can increase volunteer participation and hippotherapy team

interactions throughout treatment sessions secondary to increased knowledge and understanding of OT and OT hippotherapy services after participating in this program.

- Understand that the online OT hippotherapy program can be applied to other facilities and/or modified by other healthcare professionals involved with hippotherapy, such as physical and speech therapists for their volunteers. This program can become a permanent component to the volunteer orientation program.