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Late Breaking Research Poster 1841556

Hallucinations in Hospitaled Rehabilitation Patients with COVID-19

Mari Tobita (Rancho Los Amigos National Rehabilitation Center), Shan-Pin Fanchiang, Barry Jordan

Research Objectives: To describe the characteristics of hallucinations in hospitalized rehabilitation patients with coronavirus disease 2019 (COVID-19).

Design: An observation study of case series.

Setting: Acute inpatient rehabilitation hospital public hospital.

Participants: Patients with COVID-19 who were admitted to the acute inpatient rehabilitation unit (ARU) during a four-month period.

Interventions: Not applicable.

Main Outcome Measures: To describe the characteristics of hallucinations in hospitalized rehabilitation patients with COVID-19.

Results: Eight (21.6%) of a cohort of 37 patients admitted to the ARU with COVID-19 exhibited visual hallucinations. Most of the visual hallucinations occurred during their ICU stay. The mean age of the eight patients was 56.5-year-old (range: 38 – 71). There were seven males and one female. Seven of the eight patients exhibited peduncular hallucinations, four were associated with auditory components, five with tactile components. One patient’s hallucinations were characterized by a duplication of an extra finger, an enlargement of an upper extremity, a tactile hallucination of crawling bugs, and a somatic component of abnormal positioning of an extremity. The content of the hallucinations was related to the fearful and threatening situations in three patients and the experience of seeing deceased family members in two patients. Five of the patients had ICU delirium. Seven patients had COVID-19 pneumonia and one patient developed respiratory distress secondary to Guillain-Barre Syndrome. One patient experienced posterior reversible encephalopathy syndrome which was associated with visual hallucinations. Four patients had anxiety, four had depression, and one had both anxiety and depression. None had a pre-existing history of psychiatric illness, but one had a pre-existing history of methamphetamine use. All eight patients had evidence of cognitive impairment. Hallucinations of six patients resolved spontaneously but those of two patients had persisted during their ARU stay. The negative experience of hallucinations warranted further multidisciplinary support during their recovery.

Conclusions: Visual hallucinations can be encountered among hospitalized patients with COVID-19. It is uncertain whether these hallucinations were directly or indirectly related to the SARS-CoV-2 infection.

Author(s) Disclosures: None.

Keywords: Music, Self-Esteem, Adolescents, Academics

Late Breaking Research Poster 1841558

Mental and Behavioral Health Needs of Transition Age Youth Experiencing Homelessness During the COVID-19 pandemic

Heather Groves (University of South Florida),...

Research Objectives: For the agencies interviewed, what were the best practices utilized for the behavioral and mental health issues in TAYEH before the COVID-19 pandemic?

How has the COVID-19 pandemic affected TAYEH ability to access services and supports to address their behavioral and mental health needs?

What programs/processes/procedures are being utilized now to assist TAYEH in the time of the COVID-19 pandemic?

Design: Qualitative Method were utilized to conduct a content analysis of the data collected via recorded virtual Interviews.

Setting: The study was conducted on a virtual platform focusing on multiple agencies across the United States.

Participants: Three organizations agreed to be interviewed, with four representatives being interviewed in total.

Interventions: There was no intervention. This was a qualitative content analysis.

Main Outcome Measures: Findings from the interviews indicated increased numbers of youth trying to access services during the pandemic.
In addition, the agencies interviewed were seeing increased numbers of youth with mental and behavioral health issues, including substance abuse, PTSD, anxiety, and depression.

**Results:** The increase in need from TAYEH resulted in permanent services being added to their organization to help this population. The increase in need of services during the COVID-19 pandemic from TAYEH may have been due to limitations on the number of individuals allowed to occupy a space. It was agreed through the interviews that there could be ways to improve the services and resources for the behavioral needs of youth in their agencies.

**Conclusions:** Although there were challenges to accessing services like virtual meetings and staff illness, agencies developed strategies to meet the needs of the youth. These included creating virtual drop in centers and providing more telehealth services.

**Author(s) Disclosures:** None.

**Keywords:** Transition Age Youth, Homelessness, Covid-19, Behavioral Health, Drop-In Centers

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**Late Breaking Research Poster 1841560**

**Immediate Changes in Hip Range of Motion after Mobilization with Movement Versus Static Stretching**

William Hanney (University of Central Florida),

**Research Objectives:** To investigate the pre and post-intervention differences in hip range of motion after mobilization with movement, a static stretch, or control in those with reduced hip mobility.

**Design:** The study was a three-arm, single blind, randomized controlled trial. Subjects received pre-intervention hip range of motion measurements followed by randomization into one of three groups: [1] a supine hip internal rotation stretch [2] a supine hip internal mobilization with movement or [3] a control. A second Investigator blinded to baseline measurements completed the intervention. Post-test measurements were then obtained immediately after the intervention by an investigator blinded to group assignment.

**Setting:** The study was conducted in university clinical laboratory.

**Participants:** A convenience sample of fifty-six (56) subjects with limited hip internal rotation less than 10 degree were recruited.

**Interventions:** Subjects were randomized into one of three groups: [1] a supine hip internal rotation stretch repeated for 3 bouts of 30 seconds with a 10 second rest between sets [2] a supine hip internal rotation mobilization with movement for 3 sets of 10 repetitions and 30 seconds of rest between sets or [3] a control of lying supine for 2 minutes.

**Main Outcome Measures:** Hip range of motion including, internal rotation, external rotation, flexion and extension.

**Results:** At baseline, independent t-tests suggest no significant difference between (p>0.05). Group-by-time interactions revealed a significant difference (p<0.001) for immediate range of motion changes in the hip treatment groups for internal rotation, external rotation, flexion and extension compared to the control group. However, no significant differences were noted between the treatment groups. Within-group analysis revealed significant changes in treatment groups (p<0.001).

**Conclusions:** A lack of hip internal rotation has been associated with low back pain, hip osteoarthritis as well as sacroiliac disorders. Hip mobilization with movement and a passive internal rotation stretch demonstrated the ability to significantly improve available hip range of motion. Future research should include testing long term effects as well as serial interventions.

**Author(s) Disclosures:** Authors report no conflict of interest.

**Keywords:** Flexibility, Internal Rotation, Mobilization, Stretch

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**Late Breaking Research Poster 1841561**

**Feasibility of Moderate to High Intensity Gait Training in a Patient with Transfemoral Amputation**

Mary Crumley (Washington University Program of Physical Therapy),

**Research Objectives:** To assess the feasibility of moderate to high intensity gait training in a person with TF amputation to improve walking outcomes.

**Design:** Case study: 3 months of intervention and 1 month follow-up.

**Setting:** Outpatient Physical Therapy.

**Participants:** 64 year-old female five months post TF amputation. PMH included HTN, PVD, DMII, and current smoker.

**Interventions:** The patient attended outpatient PT visits for 3 months (24 visits). The goal for each visit was to spend 40 minutes at 60-80% of their heart rate-reserved (HRR) in the context of walking.

**Main Outcome Measures:** Number of visits the HR goal was achieved, Ampute Mobility Predictor, 10 Meter Walk Test.

**Results:** Moderate to high intensity gait training was performed in 19 of the 24 visits. The average HR goal of at least 60% HRR achieved in 10 of the 19 gait training visits. When the HR goal was achieved, the intervention was performed for an average of 44.2 (±3.8) minutes. The HR goal was not achieved in 9 visits due to: intervention performed for less than 40 minutes, average HR was below 60% HRR-15, continuous HR monitoring not possible due to equipment failure, and pain (unrelated to the intervention). For 5 visits the intervention was not performed due to: elevated BP, proton pump inhibitor use, and monthly assessments. The patient demonstrated an increase in the Ampute Mobility Predictor AMpro by 6 pts and 9pts, 10 Meter Walk Test (10MWT) self-selected (SS) by 0.11m/s and 0.24m/s, and 10MWT (fast) by 0.1m/s and 0.19 at 1 and 3 months respectively, after starting the moderate to high intensity training. At one month post training, the AMpro decreased by 3 pts and 10MWT (SS) by 0.7m/s. There was however an increase in the 10MWT (fast) 0.12m/s.

**Conclusions:** Moderate to high-intensity gait training is safe and feasible in a patient with TF amputation and it improves walking outcomes. There were no adverse reactions to the intervention. The patient was on multiple medications for BP management that may have affected HR response making it more difficult to achieve the HR goal.

**Author(s) Disclosures:** None.

**Keywords:** Transfemoral Amputation, Physical Therapy, High-Intensity Gait Training, Outpatient

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**Late Breaking Research Poster 1841562**

**How People with a Chronic Health Condition Have Promoted their Health during COVID-19**

Heather Becker (The University of Texas at Austin School of Nursing), Alexa Stuifbergen, Katherine Britt, Sungju Lim

**Research Objectives:** To interview individuals with long-standing Multiple Sclerosis about their perceptions of COVID-19 restrictions on health, health care access, and health promotion.

**Design:** A descriptive qualitative approach with maximum variation sampling was used to facilitate low inference interpretation. After coming to consensus on the codes, the researchers clustered the codes and used them to identify emerging themes, consistent with analytic techniques suggested by Miles and Huberman.

**Setting:** Telephone interviews were conducted with individuals with multiple sclerosis living in the community who were recruited from the mailing list of the National MS Society.

**Participants:** The 24 individuals interviewed had an average age of 66 years, and had been diagnosed an average of 32 years. Half were married, and 75% were female. Many had college degrees; six were employed.

**Interventions:** This is a qualitative study with no intervention.

**Main Outcome Measures:** Self-reported health, health care access, and health promoting behaviors.

**Results:** Four interconnected themes emerged from the analysis: negative effects on health and health promotion, being isolated, loss of spontaneity in daily life, and resilience. Although most individuals initially reported no effect of COVID-19 on their health, additional probing revealed that some felt weaker and had more balance problems. Normal exercise regimens had been disrupted for approximately half of them. Several also