

Late Breaking Research Poster 1841549**The Impact of the COVID-19 Pandemic on Aspects of Health Among Community Dwelling Survivors of a Moderate-Severe Traumatic Brain Injury (TBI)**

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Research Objectives: To understand the impact of the COVID-19 pandemic on aspects of health and lifestyle behaviors among community dwelling survivors of a traumatic brain injury (TBI).

Design: Cross-sectional, descriptive study.

Setting: Community-based.

Participants: N = 28 community dwelling survivors of moderate/severe TBI and were at least one year up to 5-years post-injury (M age = 40.59; SD=18.61) and part of an ongoing study.

Interventions: N/A.

Main Outcome Measures: A checklist of comprehensive health/lifestyle areas. Participants were asked think about their experiences over the past year since the COVID-19 breakout and to indicate if the COVID-19 pandemic impacted various areas of health and lifestyle (yes/no). If they endorsed "yes", they were then asked to indicate if the impact was for the better or worse for each endorsed area. They were then asked to elaborate on their response (qualitative data).

Results: All health areas were impacted by the pandemic. The most frequently impacted area was social relationships (64.3%) followed by leisure (53%), physical activity (46.4%), mental health (25%), mental activity (25%), stress management (21.4%), spirituality/purpose and meaning (21.4%), alcohol use (21.4%) and to a lesser extent tobacco use (17.9%), health knowledge/information (10.7%), nutrition (7.1%), and sleep (3.6%). Of those who endorsed being impacted by the pandemic, the following frequencies indicate health areas that worsened due to the pandemic: 92.3% for physical activity, 83.3% stress management, 83.3% social relationships, 83.3% spirituality/purpose and meaning, 71.4%, mental health, 66.7% leisure, 66.7% tobacco use, 53.6% leisure, 50% alcohol use, and 25% mental activity. Areas that were reported "better" were 100% for nutrition and dietary intake, 100% for health knowledge/information, and 100% sleep.

Conclusions: The pandemic negatively impact numerous health areas among community dwelling survivors of a TBI. Addressing the impact of the COVID-19 pandemic on health areas along with taking into consideration the likely disruptions in healthcare will help identify survivors who may benefit from health promotion interventions to prevent or intervene on secondary health conditions.

Author(s) Disclosures: No conflicts of interest.

Keywords: COVID-19, Traumatic Brain Injury, Health, Lifestyle medicine, Health Behaviors

Late Breaking Research Poster 1841550**Examination of Health Areas for Change Among Community Dwelling Survivors of a Moderate-Severe Traumatic Brain Injury: A Need for Patient-Centered, Comprehensive Health and Wellness Initiatives**

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Research Objectives: To understand health areas for potential change among community-dwelling survivors of a moderate/severe traumatic brain injury (TBI).

Design: Cross-sectional, descriptive.

Setting: Community-based.

Participants: As part of an ongoing study, N = 28 community dwelling survivors of a moderate/severe TBI who were enrolled in the UAB TBI Model System longitudinal study and at least one year up to 5-years post-injury (M age = 40.59; SD=18.61) served as participants to date.

Interventions: Telehealth-based, health and wellness intervention.

Main Outcome Measures: A checklist of comprehensive health areas developed for the study. Prior to the beginning of the intervention, participants are asked to rate their preferences among twelve health areas that they might be interested in improving and to rank-order their health goal preferences they wanted to work on for the intervention in order of importance (1st, 2nd, etc.).

Results: All health areas were endorsed as goals of interest for changing. The top five health goals included: physical activity and exercise (92.9%), mental activity (85.7%), nutrition and dietary intake (78.6%), health knowledge and information (78.6%), and stress management (71.4%) which tied with mental health (71.4%). To a somewhat lesser extent, social relationships (64.3%), spirituality/purpose and meaning (50.0%), sleep (35.7%), leisure (28.6%), alcohol use (17.9%), and tobacco use (17.9%) were also of interest. Every health goal received at least one ranking of being a number one goal to address as part of a health intervention.

Conclusions: The findings demonstrate a range of health goals of interest to community dwelling survivors of a moderate/severe TBI 1-year or greater post-injury. While traditional rehabilitation programs typically focus more on mental health, physical, functioning, and cognitive issues, the current findings warrant the need for expanding services to address additional areas (e.g., spirituality/purpose and meaning, leisure, social relationships). Given the range of health goals that individuals ranked as first choice preferences, the findings highlight the need for health and wellness programs that can be individually tailored. Consistent with Healthy People 2030, a more expansive conceptualization of health may help modify preventable secondary health conditions and continue to optimizing recovery.

Author(s) Disclosures: None.

Keywords: Traumatic Brain Injury, Health behaviors, Lifestyle, Health, Wellness

Late Breaking Research Poster 1841552**Spinal Cord Stimulators: Patient Safety and Adverse Outcomes from Imaging**

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Research Objectives: A literature review of the current recommendation for SCS compatibility with MR imaging and a review of the Food and Drug Administration (FDA) approved spinal cord stimulation systems were performed.

Design: The literature review was completed using PubMed, the FDA website (www.fda.gov), and the SCS manufacturers' websites.

Setting: N/A.

Participants: N/A.

Interventions: N/A.

Main Outcome Measures: Is the usage of MRI safe in patients with spinal cord stimulators (SCS)?

Results: The current recommendations, composed on the basis of evidence-based medicine, reveal close adherence of an MRI with a 1.5T magnet and a mean total body specific absorption rate (SAR) of 0.9 W/kg or below which can promote patient safety and satisfaction, despite the variability between different SCS manufacturers. Measurement of safety includes tearing of tissues due to rotational force generated by the magnetic field, acceleration of the device towards the bore of the magnet ("missile effect"), and burns caused by overheating of the device.

Conclusions: Strict adherence to an MRI with a 1.5T magnetic bore core and a SAR of 0.9 W/kg or below can promote patient safety despite the various SCS developed by manufacturers. Providers and technicians should be encouraged to seek specific SAR and Slew Rate and Field Strength conditions found on the manufacturers' website to yield the highest safety index and optimal image quality.