

Supportive Living Inc.

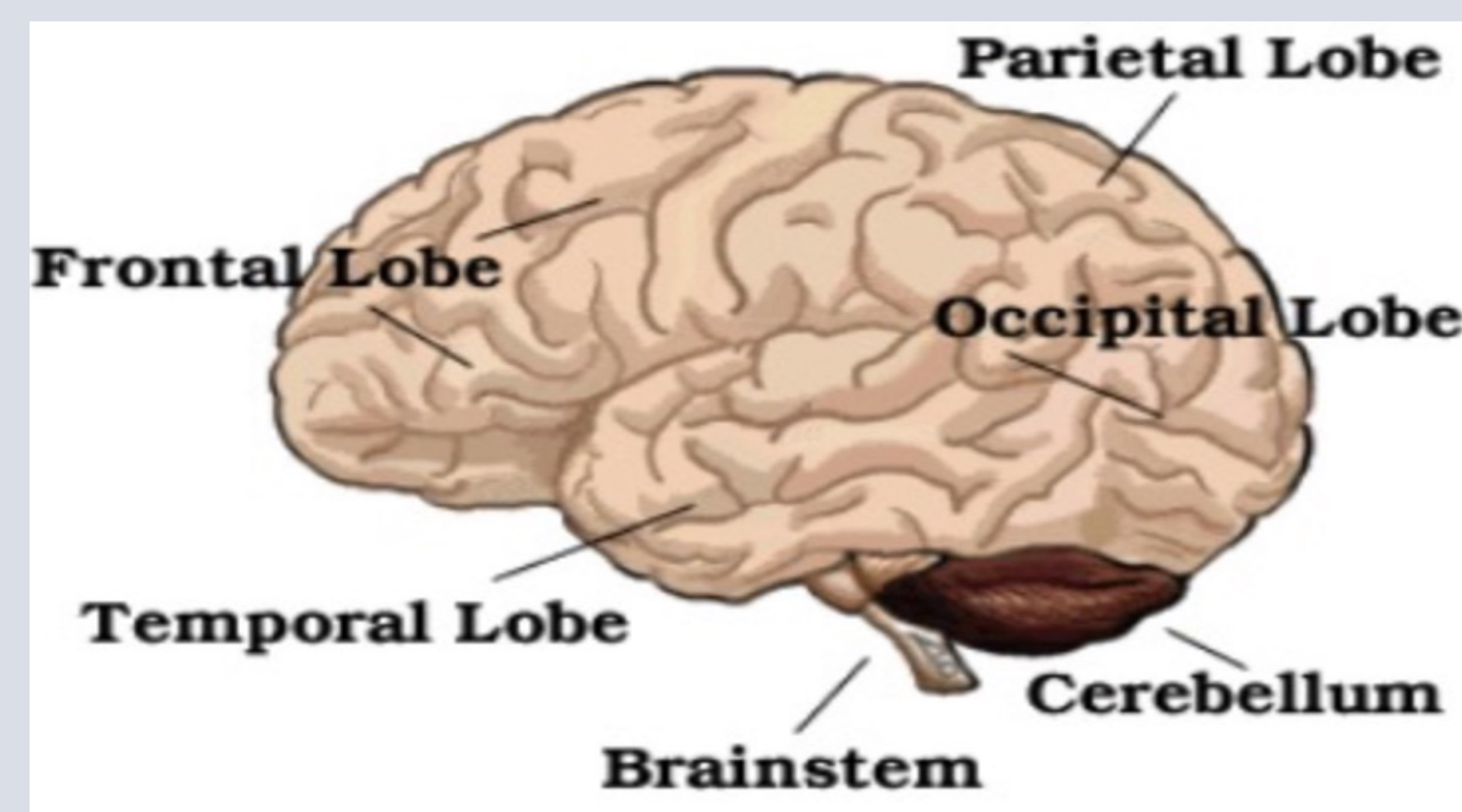
Neuro-Fit assisted Exercise is an evidence based exercise class designed for people living with functional limitations caused by brain injury or other neurological condition.

Each one hour session is an assisted exercise class that features aerobic exercises to improve cardiovascular fitness, functional exercise to improve strength mobility, as well as balance. One on one instructions are utilized to monitor progress and performance to work towards specific and individualized fitness goals (Supportive Living Inc. n.d).

Cardiovascular	Strength	Balance
Flexibility	Weight	Blood pressure
Sleep	Memory	Communication
Socialization	Self-esteem	Sense of purpose

Factors to Consider

Each person with a Traumatic Brain injury is affected differently:



The brain is made up of six parts that can be injured in a head injury. The effect of a brain injury is partially determined by the location of the injury. Sometimes only a single area is affected, but in most cases of TBI multiple areas have been injured.

- The brain is divided into two halves. The left half controls movement and sensation in the right side of the body, and the right half controls movement and sensation in the left side. Thus, damage to the right side of the brain may cause movement problems or weakness on the body's left side.
- For most people, the left half of the brain is responsible for verbal and logical functions including language.
- The right half is responsible for nonverbal and intuitive functions such as putting bits of information together to make up an entire picture, recognizing oral and visual patterns and designs.

(Model Systems Knowledge Translation Center 2019, p. 1, 2).

Having a brain injury makes it hard for those who do to complete daily activities. This can include having trouble advocating for oneself because of certain cognitive abilities that may have developed over time. One of the hardest tasks as a health promotion advocate and staff at Supportive Living Inc. (SLI) who work in public areas such as the YMCA, is sharing spaces with others who may not be aware of what brain trauma looks like and how to properly share spaces with SLI participants.

Project Objectives/Tasks

Project Objectives

- Outline concerns of accessibility that program coordinators, participants, and participant caretakers have
- Create a new section in each patient chart that addresses concerns to accessibility
- Document and research participants personal concerns during daily conversation
- Create materials for future interns that will help them better advocate for people with traumatic brain injuries

Daily Tasks and Responsibilities

- Conduct initial assessments of brain trauma patients to understand their physical and cognitive ability
- Communicate with participants and their caretaker daily and document any occurrences that relate to physical and mental health
- Initiate conversation regarding any concerns participants may have about their program
- Document any observations regarding participants attitude and feelings about any concerns
- Make participants feel safe and cared for when they come into secondary spaces (YMCA Gyms)
- Discuss changes with Site Supervisor or YMCA staff that can help with making fitness a meaningful experience for participants living with TBI's

Methodology

A qualitative study was performed to research adaptations that could be made to patient charts.

10 participants (all with different ability levels), were asked what their hardships were before, during, and after their fitness sessions.

These hardships were then documented.

Methods were researched and then adaptations to patient charts were made with the approval of site supervisor.

Participant caretakers and YMCA Staff were also made aware of certain accessibility adaptations that would be required for future interns to perform.

Results

The results section will focus on first hand accounts on what participants feel would make the program more accessible to them. Please see table below. Follow along by first reading the participants diagnosis, followed by the description of their ability level, and lastly by reading their statement. Their statement will outline the adaptation that was researched, discussed, and documented as a change to their chart. 3 examples are outlined, but 10 patient charts were adapted.

Participant Diagnosis	Description of Ability Level	Participant Accessibility Concern
Left Side Stroke	A left hemisphere stroke effects the daily task of talking, confidence levels, planning, staying organized, and coordination. This participant wears an AFO on the right side. They are able to walk independently but struggle with balance. Relies on "The Ride" to get to sessions.	Patient has trouble with conversation. Apologizes often and uses incorrect language. "The Ride" comes 15 minutes early to pick up participant. Leaves sessions early. Difficulty getting up the stairs. Aphasia makes communication difficult to speak and express concerns.
Stroke	Patient cannot walk independently. Relies on wheelchair to get around. Lives with wife who is also his primary caretaker. Able to communicate and talk independently. Left side weakness.	Beverly YMCA ramp to enter the building is very long (Figure 1). Had to miss three workout sessions because their caretaker was sick. Tries to use the machines, but the distance between machines are too close. Wheelchair can not get through the gym.
Left Side Stroke	Patient is non verbal. Communicates with simple head nods or hand signals. Very comprehensive and aware. Relies on her wheelchair to get around. Right side is the effected side.	Can not get to the gym unless the elevator is fully functioning. Doorways are very small and sometimes there are items blocking the entrance of the elevator. Non verbal so others around the gym may not be aware of this.



Conclusion

To sum up all data, three out of ten patient adaptations as seen in the results chart are listed below:

1. SLI Staff call "The Ride" to set up pickup and drop off times to ease Aphasia and confidence concerns.
2. Make sure intern greets participant from outside and brings them up the ramp to help caretaker. Had to relocate machine so the wheelchair could fit.
3. Participant is non-verbal. Intern must serve as a voice at all times.

The biggest takeaway from this internship was learning what individualized care is and how to successfully research and advocate for those who have experienced brain trauma/disability.

Personalized care means being able to provide standardized care which makes participants feel appreciated and heard.

Participants were eager to discuss their challenges and difficulties, positives and negatives. Participants are appreciative and kind.

References

- Neuro-Fit – Supportive Living Inc.. Supportive Living Inc. (n.d.). Retrieved from <https://www.supportivelivinginc.org/neuro-fit/>
- Understanding Traumatic Brain Injury - MSKTC. (2019). Retrieved from <https://msktc.org/sites/default/files/2022-06/TBI-Understand-TBI-Part-2.pdf>