

West HSJCC Lunch and Learn

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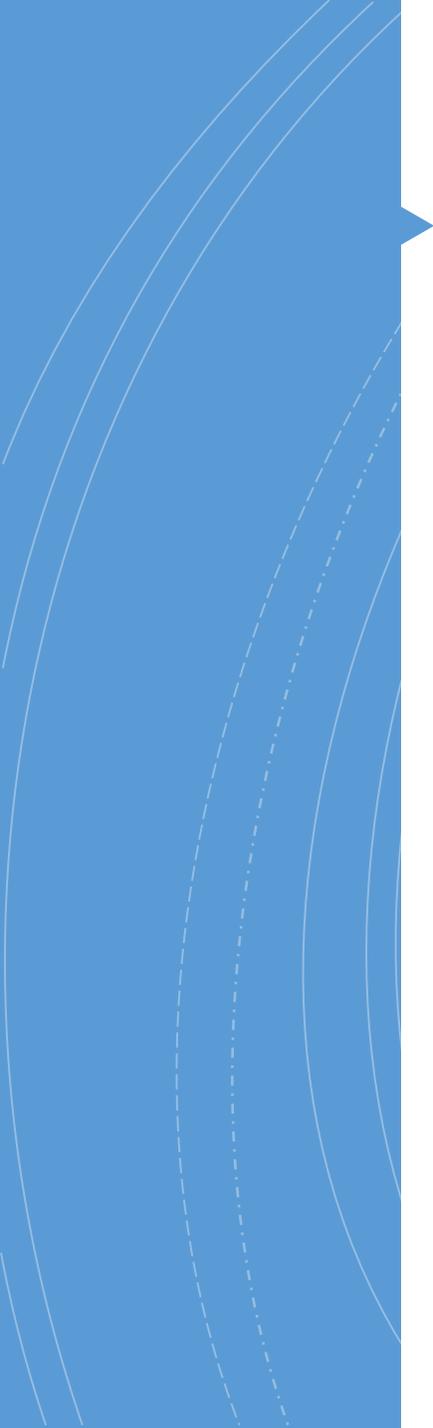
Traumatic Brain Injury and the Criminal Justice System



Speakers

Dr. Catherine Wiseman-Hakes is a speech language pathologist and Assistant Clinical Professor in the Speech Language Pathology Program at McMaster University. She has devoted her clinical and research career toward a better understanding of the factors which impact recovery from acquired and traumatic brain injury as well as developing interventions to support positive outcomes and quality of life. She has a particular interest in vulnerable populations and has conducted research with youth and adults with traumatic brain injury who intersect with the criminal justice system.

Dr. Flora Matheson leads the Justice and Equity Lab located at MAP Centre for Urban Health Solutions, St. Michael's Hospital. She is an Associate Professor at Dalla Lana School of Public Health. Her research is focused on solutions to reduce social and health inequities among people experiencing problem gambling and imprisonment; solutions that are built with and for these communities. As a Sociologist she uses a gender lens and the social determinants of health approach to enact change. She is leading a series of studies on traumatic brain injury in the criminal justice system.



Learning Objectives

1. Understand Traumatic brain Injury (TBI) and the associated cognition, communication and behavioural challenges
2. Understand TBI as a risk factor for criminal justice involvement and the prevalence in correctional populations
3. Understand supervision condition challenges for people with TBI
4. Learn strategies to support clients with TBI and available resources

Learning Objective 1

Traumatic Brain Injury and Associated Challenges



Acquired Brain Injury: An 'Umbrella Term'

Traumatic Brain Injury

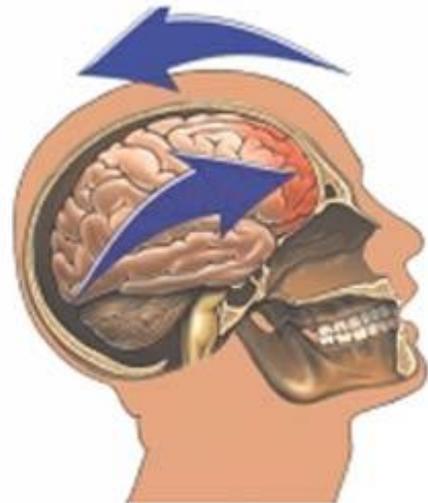
- Defined as “an alteration in brain function or other evidence of brain pathology caused by an external force”
(Menon et al 2010)

Non Traumatic Brain Injury

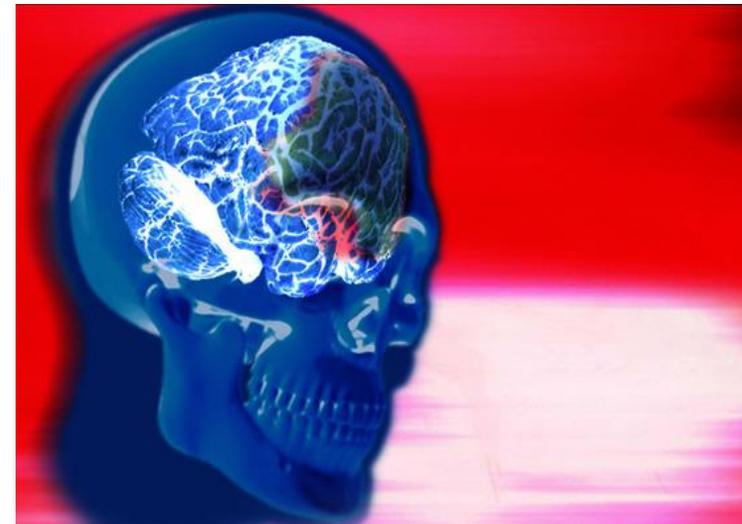
- Anoxia
- Brain tumours
- Encephalitis
- Metabolic encephalopathy
- Toxic effects
- Vascular insults
- Other brain disorders & infections
- Fetal Alcohol Spectrum Disorder

Mild Traumatic Brain Injury/Concussion?

- Mild TBI/Concussion is a complex pathophysiological process affecting the brain, induced by biomechanical forces resulting in a traumatically induced physiological disruption of brain function: and yes, a concussion IS a brain injury



The head strikes a hard object creating a concussion-type injury



Mild Traumatic Brain Injury

Indicators: American Congress of Rehab Medicine 1993

1. Any period of loss of consciousness;
 2. Any loss of memory for events immediately before or after the accident;
 3. Any alteration in mental state at the time of the accident (eg, feeling dazed, disoriented, or confused); and
 4. Focal neurological deficit(s) that may or may not be transient; but where the severity of the injury does not exceed the following:
 - loss of consciousness of approximately 30 minutes or less;
 - after 30 minutes, an initial Glasgow Coma Scale (GCS) of 13–15; and
 - posttraumatic amnesia (PTA) not greater than 24 hours.
- Majority of concussions, (especially first time) resolve within 1-3 months.
 - ~ 30% of children and youth continue to be symptomatic at 3 months.
 - Risk factors for persistent symptoms include: Sex (female) Age (children, youth and older adults), history of previous concussion, sleep disorders, migraines, learning disability and ADHD.



Traumatic Brain Injury: A Disease Process; Not an Event

- Meets the World Health Organization criteria for chronic disease (Masel, 2010)
- Has chronic and evolving neurological consequences (Wilson et al., 2017)
- Should be viewed as and thus managed as a chronic disease and defined as such by policy makers, health care and insurance providers (Masel, 2010)

Traumatic Brain Injury Symptoms

- TBI can result in significant cognitive, behavioural, physical and emotional changes to an individual
- TBI is often referred to as an “invisible” disability because there may be no obvious/outward signs of the disability, and the symptoms may be seen as other illnesses or character traits

Cognition, Communication and Behaviour

- TBI is associated with cognitive, communication, emotional and behavioral challenges that complicate management during incarceration and create barriers to successful community reintegration.
- Cognitive challenges include alterations in; attention, memory, multi-tasking, self-monitoring, planning and organizing, problems solving and reasoning.
- Emotional challenges may include increased lability, or reduced affect and initiation. Difficulty with facial emotion recognition, alexithymia, aggression, depression and anxiety are also prevalent.
- Cognitive-communication refers to difficulties with any aspect of communication; listening, understanding, speaking, reading, writing and thinking, due to underlying cognitive impairments. This also includes challenges with behavioral self regulation that impact social communication. (Wiseman-Hakes 2010, 2014, 2019)

Communication:
Listening,
Speaking,
Reading, Writing &
Thinking

Behavior:
Impulse control,
Emotional
(Dys)regulation,
Changes in
affect

**Traumatic
Brain Injury**

Emotion:
Heightened or
blunted emotional
response,
Depression,
Anxiety

Cognition: Attention,
Memory, Processing
Reasoning, Problem –
Solving, Executive
Functions

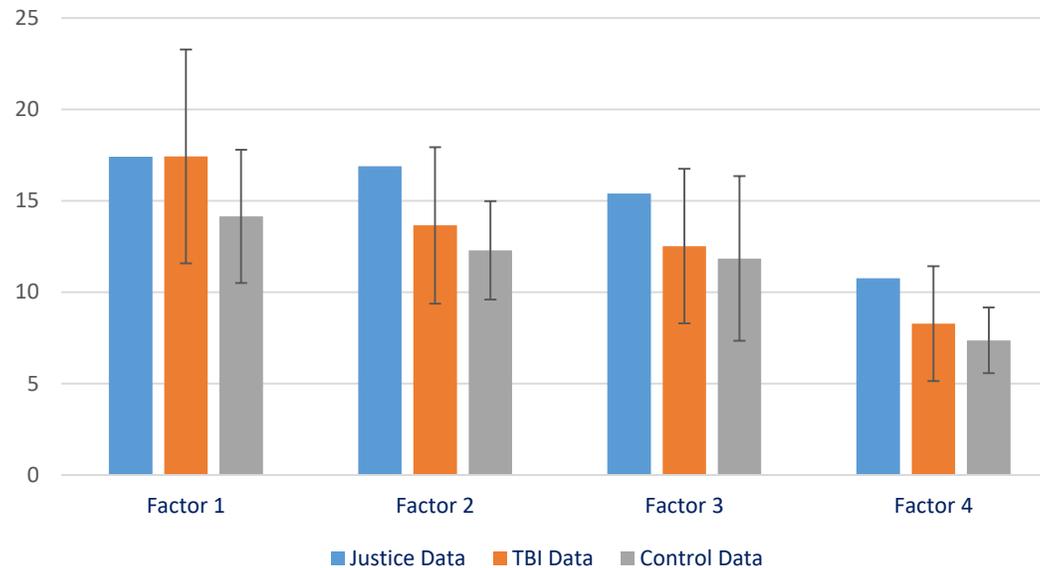
Communication: listening, speaking, reading, writing and thinking.....

“Verbal communication is the primary interface with the justice system in almost every jurisdiction, from the moments leading up to and following apprehension and questioning by police, to discussions with lawyers, court hearings, and throughout any restorative justice and/or rehabilitation processes.....Therefore, any barriers to being able to participate fully—be it through impaired cognitive abilities; language or cultural barriers; and/or difficulties with hearing, auditory processing, or language skills—have implications for the offender’s basic rights and access to justice.” Lambie, 2020

Communications Challenges

- In a recent study by our group, adult participants with histories of TBI and criminal justice system involvement reported significant cognitive-communication and social communication challenges at rates even greater than individuals with moderate-severe TBI and no history of criminal justice system involvement. (Wiseman-Hakes & Matheson et al., under review)

Comparison of Factor Scores



Legend:

Factor 1: Quality of Communication

Factor 2: Quantity (too much or too little)

Factor 3: Manner (e.g., appropriate response or able to modify with context)

Factor 4: Relation (e.g. following conversations in noisy environments?)

Teasing out Emotional Dysregulation and Communication

- Anxiety, depression, anger and overall emotion dysregulation are common after TBI.
- These emotional impairments are often challenging to treat and ultimately become chronic problems for individuals with TBI.
- They also have an adverse impact on psychosocial functioning, relationships, community re-integration, and quality of life, and often lead to recidivism in corrections populations.
- Following TBI, many individuals have problems processing emotions. (Neuman et al 2018)

Difficulty Reading Emotions

Happy



Sad



Angry



Laugh



Curious



Scared



Confused



Embarrassed



Excited



Stubborn



What is Alexithymia?: A Deficit in Emotion- Processing

Alexithymia is present in 30-61% of individuals with TBI compared to 10% in a non-TBI population.

Characterized by:

- Poor awareness for personal emotions and emotions of others;
- Reduced acknowledgement of physical sensations and association with emotional responses (e.g., elevated heart rate and fear);
- Difficulty describing and/or trouble distinguishing emotions (e.g., differentiating anger from sad);
- Preference for discussing concrete or superficial facts rather than emotions. (Neuman et al 2018)

Additionally: Negative Attribution

In addition to Alexithymia, these individuals tend to experience 'Negative Attribution' (example; 'He looked at me funny..... he's out to get me').

In lay terms they interpret or misinterpret another's intent as being negative, even when it isn't.

This is often combined with behavioural dysregulation (meaning poor impulse control)...

Learning Objective 2

**TBI Prevalence and
Criminal Justice Involvement**



Why is it important to consider TBI in the Context of Criminal Justice

- Interactions with police, and front-line workers, probation and parole officers, to formal proceedings, (e.g. bail hearings, court trials) involves complex social interactions that typically require high-level and fast paced processing of information, understanding and responding.
- Impairments in working memory and speed of processing compromise comprehension in these contexts. (Wszalek & Turkstra, 2015)
- Memory deficits as well as increased anger, impulsivity and irritability create challenges for people involved with the criminal justice system. (Gordon, 2012)

TBI and Criminal Justice Populations

- TBI more prevalent among people in prison ranging from 35.7% to 88%. (Allely, 2016; O'Rourke, Linden, Lohan, & Bates-Gaston, 2016; Diamond, Harzke, Magaletta, Cummins, & Frankowski, 2007; Ray, Sapp, & Kincaid, 2014)
- Injury counts are underestimated: people not aware of early life injuries or the seriousness of injuries as adults (e.g., female sex workers). (Ferguson, Pickelsimer, Corrigan, Bogner, & Wald, 2012; Baumann...Matheson, 2018)
- In a screening study, the average reported number of TBIs among people in prison was 1.1 to 2.7 and average number of symptoms was from 1 to 19. (Ferguson, Pickelsimer, Corrigan, Bogner, & Wald, 2012)
- In Ontario, men and women who sustained a TBI were 2.5 times more likely to be incarcerated than men and women who had not sustained a TBI. (McIsaac et al., 2016)
- In Ontario, adult men and women with TBI were 39 times more likely to incur a in-prison serious disciplinary charge relative to those without TBI (unadjusted). (Matheson et al., 2020)

TBI: A Risk Factor for Incarceration

- Adverse early life experiences are common for persons with a history of TBI and incarceration particularly for criminalized women. (Colantonio et al., 2014)
- Approximately 75% of women survivors of IPV are living with probable TBI. (Haag et al, 2019)
- Women inmates who are convicted of a violent crime are more likely to have sustained a pre-crime TBI and/or some other form of physical abuse. (Brewer-Smith et al, 2004; https://www.cdc.gov/traumaticbraininjury/pdf/prisoner_tbi_prof-a.pdf)
- Having a history of diagnosed TBI and/or repeated hits to the head neck or face increases the risk of recidivism by 69%. (Ray et al., 2017)
- The prevalence rates are so significant that the U.S. Centers for Disease Control Prevention (CDC) have identified TBI among prisons and jails as a significant public health problem (CDC Brainline.org)

Professional Misconceptions of TBI

- Challenges associated with TBI can be misinterpreted as:
 - Non-compliance
 - Rudeness
 - Defiance
 - Poor motivation
 - Disengagement
 - Aggression (Snow & Powell, 2012)
- Some evidence suggests there is limited awareness and common misconceptions of TBI prevalence and challenges among supervision officers, which may contribute to poor supervision outcomes. (O'Rourke et al. 2018)

Learning Objective 3

**Court-mandated supervision
conditions and TBI**



Individuals Under Supervision in Canada

- The number of individuals under court mandated supervision conditions (e.g., probation, parole, and pre-trial supervision) exceeds the number in custody in correctional facilities in Canada. (Malakieh, 2020)
- The actual number of adults under federal and provincial/territorial supervision is over 2.5 times the number in custody on any given day. (Malakieh, 2020)
- In 2018/2019, the rate of adults under community supervision in the provinces and territories was 321 adults per 100,000 population.
- In 2018/2019, there was 70% more adults on remand daily than in sentenced custody (14,778 versus 8,708) in the provinces and territories.

Challenges with Court Mandates Conditions of Supervision

- Most people released from custody have bail, probation or parole conditions that must be followed, but that can pose significant challenges.
- Orders to avoid particular people and places can reduce access to vital social support networks and services.
- Orders to abstain from drugs and alcohol may prove challenging for those with a history of substance use.
- When one has a criminal record, it can be difficult to abide by orders to find employment.
- Add other complex factors on top of that – like a traumatic brain injury (TBI), financial and housing insecurity, or mental illness – and the prospects of successfully re-entering society and staying out of prison are grim.

TBI and court mandated supervision conditions

- TBI history being is associated with greater risk of behavioural infractions, treatment non-adherence, failing to appear for mandatory appointments, probation and parole violations and revocations (Gorgens et al., 2021; Nagele et al., 2018; Piccolino & Solberg, 2014).
- Qualitative research on the experiences of justice-involved persons with a history of TBI is rare (Linden, O'Rourke, Monaghan, & Rainey, 2021), especially studies considering gender differences.
- There have been no studies of the everyday interactions, perspectives, practices among control agents and supervised subjects related to managing conditions in the context of TBI.

Challenges of Court Mandated Supervision

- Community supervision places people under a set of restrictive conditions, which are often applied and enforced without careful consideration of individual circumstances.
- Complying with standard supervision conditions may be difficult or impossible for people with TBI and violating conditions can result in a return to custody or bail revocation. (Ricciardelli et al., 2019)
- The most common non-compliant activity was failure to report to the probation officer. (Norman et al., 2021)
- People on probation with TBI are more likely to be viewed high risk by probation officers, have a higher rate of felony convictions, have lower rates of successful probation completion, and are significantly more likely to re-offend. (Gorgens et al., 2021)

Breaking the Cycle Solution Network



Link: <https://youtu.be/gN6jkDDhwQA>

Current Breaking the Cycle Network

- Human Services and Justice Coordinating Committees
- Probation Officers Association of Ontario (POAO)
- John Howard Society of Toronto
- John Howard Society of Ontario
- Ministry of the Solicitor General (Health Services)
- Provincial Acquired Brain Injury Network
- Elizabeth Fry Society Toronto
- Canadian Mental Health Association
- COTA
- Ontario Brain Injury Association (OBIA)
- Justice & Equity Research Program

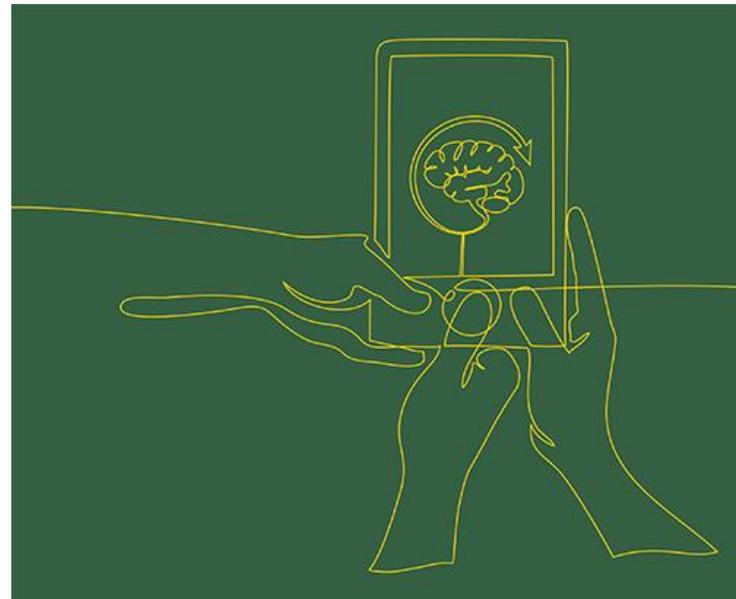


Illustration by Joe
Fleming
<https://www.joefleming.com/>

Breaking the Cycle Network: Solution

- Working with our partners, we will design, develop and launch a mobile health app to help people with a history of TBI manage court mandated conditions of supervision to reduce revocations that can result in return to custody.

Funding: Supported by Donors through the St. Michael's Hospital Foundation and the Social Sciences and Humanities Research Council of Canada (435-2022-0710)



Learning Objective 4
Strategies to Support
Clients with TBI and
Available Resources



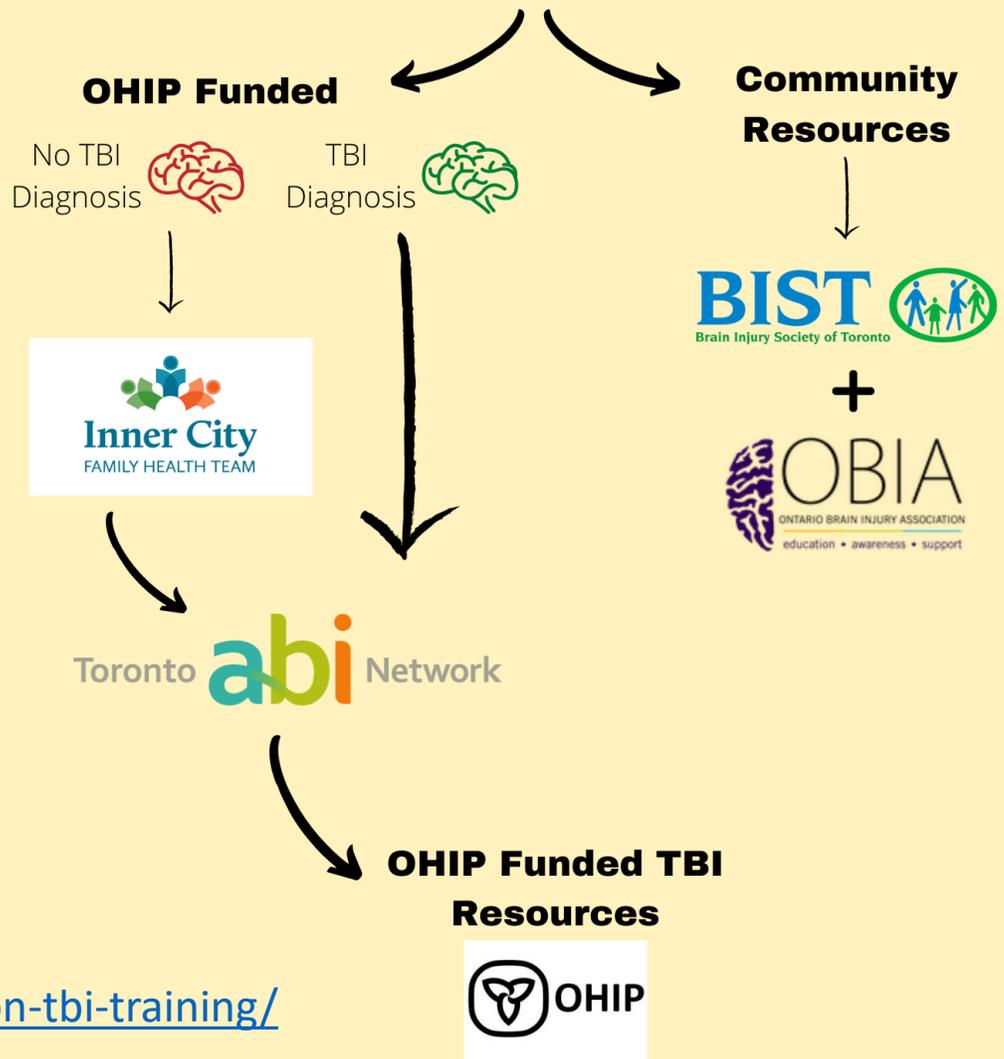
Supporting Cognitive-Communication Challenges

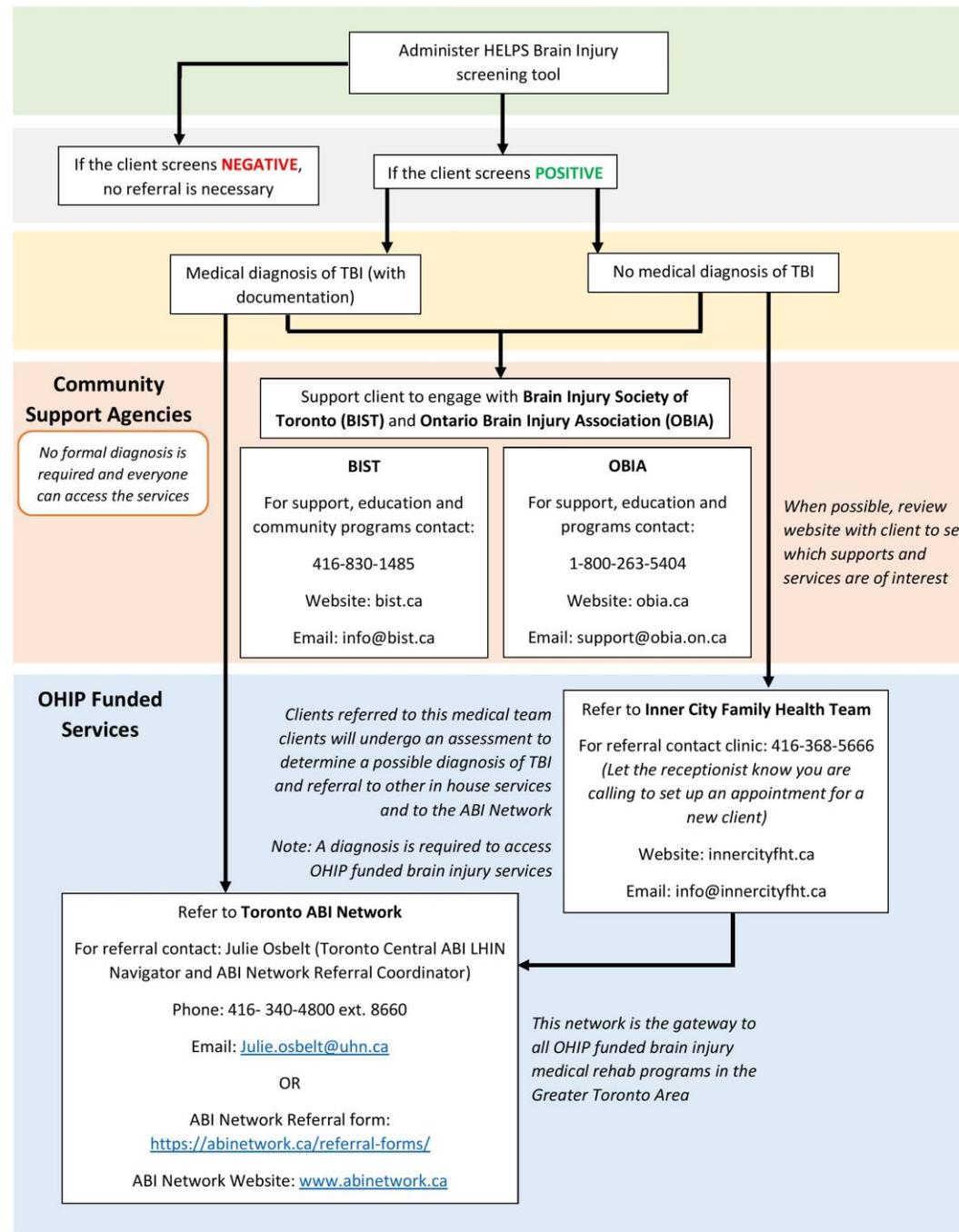
- Wherever possible, work with clients in a quiet room with limited distractions. If they are bothered by bright lights, turn the lights down.
- Speak a bit more slowly than you might normally and use shorter sentences.
- Ask if they have any hearing challenges and if so, if one ear is better than the other? (Hits to the side of the head can lead to hearing loss).
- Pause in between and give you to client time to process.
- Let clients know this is a safe space and they can ask for repetition or clarification any time.
- Provide a brief summary of the main points after each section of the conversation and ask your client to tell you what they understand. Don't ask them if they understand because 99% of the time they will just say yes!
- Write some notes to give to the client if they think it would be helpful.
- Set up realistic reminder strategies.

THE REFERRAL NETWORK

JohnHoward
SOCIETY OF TORONTO

JHST or any organization,
Corrections/justice staff





Brain Injury Society of Toronto



- BIST provides programs and services to people living with an acquired brain injury (ABI), their families and caregivers
- Charitable non-profit organization funded by donations, money raised by events, and sponsorship programs
- Mission is to enhance the quality of life of people living in the City of Toronto with an ABI, through advocacy, awareness, education and support

Support Provided by BIST Staff

- Securing identification
- Obtaining medical services/Family Doctor
- Accessing supports
- Completing income support applications
- Navigating the process of ODSP or CPP-D
- Applying for additional income by completing income tax returns and tax credits
- Accessing Legal Support
- Food security
- Arranging services and accompanying individuals to appointments
- Support maintaining income
- Keeping notes and reminders to ensure follow through
- Reminder phone calls and support maintaining a schedule

The Compassionate Justice Fund

- The ***Compassionate Justice Fund*** in partnership with the Ontario Brain Injury Association, was created to bridge a critical gap in funding for rehabilitation services for people with traumatic brain injury (TBI) from underserved communities who have no other access to therapies.
- A formal diagnosis of TBI is not necessary.
- We provide real-world, on the ground solutions, including rehabilitation therapies, case coordination support, and technology access devices for people across Ontario age 16 and older
- Some of our clients are or have been incarcerated. All have mental health challenges, have experienced violence; many have experienced abuse and/or precarious housing.
- Currently accepting applications until May 30th for funding to begin in June.
- Next application round begins June 1 for funding in December.
- Emergency applications for immediate funding on a case by case basis welcome.
- We also refer to and work closely with partner organizations.



Resources

An online toolkit for people with brain injuries in the Justice system.

- Section for those with lived experience
- Section for justice professionals



www.abijustice.org

A registered non-profit organization that can provide funding for rehabilitation for underserved and marginalized individuals



www.compassionatejusticefund.org

Burning questions?



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Resources

- Anishinaabe Health Toronto (AHT): <https://www.aht.ca/>
- The Brain Injury Society of Toronto or Peel Halton: <https://biaph.com/>
- Brain Injury Association of Ontario: <http://obia.ca/> (online support groups and peer mentoring)
- The Toronto ABI Network: <http://www.abinetwork.ca/>
- Traumatic Brain Injury (TBI) Clinic at Sunnybrook: <https://sunnybrook.ca/content/?page=bsp-traumatic-brain-injury-clinic>
- Head Injury Clinic, St. Michael's Hospital: <http://www.stmichaelshospital.com/programs/trauma/head-injury-clinic.php>
- COTA's Acquired Brain Injury (ABI) Case Management program: <http://www.cotainspires.ca/content.php?doc=631>
- Central Ontario, Toronto Network of Specialized Care: <http://www.community-networks.ca/>
- CHIRS, **Community Head Injury Resource Services**: <http://www.chirs.com/>
- March of Dimes Canada: <https://www.marchofdimes.ca/EN/programs/Pages/default.aspx>
- List of Provincial ABI Navigators:
http://abinetwork.ca/uploads/Image/PROVINCIAL_ABI_NAVIGATORS_Contact_List_2017.pdf

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