

National Capacity Building Project: Technical Assistance of the Survivor of Torture Programs

Assessment and Treatment of Traumatic Brain/Head Injury in Survivors of Torture

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February 8th, 2024



The
CENTER for
VICTIMS of
TORTURE



Harvard
Program
in Refugee
Trauma



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Overview

- This webinar is brought to you today by the Office of Refugee Resettlement.
- The National Capacity Building Project is a project of the Center for Victims of Torture in partnership with Harvard Program in Refugee Trauma and the National Consortium of Torture Treatment Programs.



Disclaimer

We will be talking about trauma today. Trauma impacts all in different ways but it is something we have all had some experience with. The information, images, and discussions can be triggering or uncomfortable at times. Make sure you monitor and take care of yourself when and if you need to.



Objectives

After attending this webinar, participants will be able to:

- Recall the historical significance of identifying THI/TBI in survivors of extreme violence
 - Understand the neuroscience of THI/TBI in survivors of torture
 - Recognize the high prevalence of THI/TBI in survivors of torture
 - Recognize how traumatic brain injury results in heterogeneous symptoms, which vary depending on the nature, mechanisms, and severity of injury
 - Learn common tools for screening for TBI and post-concussive symptoms
 - List the interventions used to treat TBI symptoms and recognize when and where to refer people with TBI for evaluation and treatment
-



Presenters


Harvard Program in Refugee Trauma | Massachusetts
General Hospital | Harvard Medical School



Richard F. Mollica,
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Why THI/TBI is Not Readily Identified and Treated in Torture Survivors?


1. Primary care practitioners are not trained to identify and refer THI/TBI patients.
 2. No simple, valid and reliable screening instruments with good psychometric properties.
 3. The patient and/or family does not recognize THI and the resulting symptoms of TBI as a medical problem. In many cultures a “folk diagnosis” does not exist for the presence of an organic brain syndrome. The symptoms of TBI are usually considered as “emotional” or as a negative character trait that is under the person’s willful control.
-



Why THI/TBI is Not Readily Identified and Treated in Torture Survivors?

4. The most common enduring symptoms of THI/TBI overlap with other psychiatric problems such as PTSD and depression:

- Poor executive functioning: planning, organizing, learning
 - Impaired concentration
 - Memory problems
 - Easily confused
 - Headache
 - Photosensitivity
 - Fatigue
 - Depression symptoms
 - Irritability
 - Anxiety symptoms
-



Why THI/TBI is Not Readily Identified and Treated in Torture Survivors?


5. THI/TBI diagnosis can be hidden behind the diagnosis of PTSD, depression, anxiety disorders, and substance abuse.
 6. Strategies for treatment have not been developed for primary healthcare and community-based torture treatment centers.
 7. Linkages of primary healthcare and community-based torture treatment centers to specialized THI/TBI government-provided resources (state, VA) are weak, especially for non-English speaking patients.
-



The Norwegian Investigation (1961)

- n = 100 concentration camp survivors (out of 300).
- All had been systematically tortured.
- Most common torture: blows and kicks to the head, often with serious sequelae (e.g., loss of consciousness).
- Defined for the first time as the “concentration camp syndrome”.

Eitinger, L. (1961). Pathology of the concentration camp syndrome: Preliminary report. *Archives of General Psychiatry*, 5(4), 371-379.



Symptomatology of the Concentration Camp Syndrome

- Failing Memory And Difficulty Concentrating
 - Nervousness, Irritability and Restlessness
 - Fatigue
 - Nightmares and/or Sleep Disturbances
 - Headaches
 - Emotional Instability
 - Dysphoric Moodiness
 - Vertigo
 - Loss of Initiative
 - Feelings of Insufficiency
-

Concentration Camp Syndrome in Relation to Conditions during Imprisonment

FACTORS	TOTAL (n - %)	≥ 7 SYMPTOMS n (%)
1. Loss of Weight		
• More than 30%	61	47 (77%)
• Less than 30%	17	6 (35%)
2. Captivity		
• Severe Degree	69	50 (77%)
• Moderate Degree	31	15 (48%)
3. Head Injury		
• (+)	50	39 (78%)
• (-)	50	26 (50%)

Eitinger, L. (1961). Pathology of the concentration camp syndrome: Preliminary report. *Archives of General Psychiatry*, 5(4), 371-379.



The Norwegian Investigation (1961)

- THI highly correlated with concentration camp syndrome (78%).
- 75% of the sample had abnormal pneumoencephalographic findings.

Eitinger, L. (1961). Pathology of the concentration camp syndrome: Preliminary report. *Archives of General Psychiatry*, 5(4), 371-379.




The Norwegian Investigation (1961)

“Our figures . . . confirm the assumption that organic brain changes produced by the various traumatic situations reported . . . form the basis of the concentration camp syndrome.”

Leo Eitinger - 1961

Eitinger, L. (1961). Pathology of the concentration camp syndrome: Preliminary report. *Archives of General Psychiatry*, 5(4), 371-379.



Traumatic Head Injury/Traumatic Brain Injury (THI/TBI)

An injury to the brain, whether or not it is associated with lasting functional impairment. The exact nature of the symptoms depends upon the type and severity of the injury. Injuries include penetrating injuries, closed head injuries, and exposure to blasts. Disruptions in brain functioning can include a decreased level of consciousness amnesia, or other neurological or neuropsychological abnormalities.

Tanielian T, Jaycox LH, et al. (2008). Invisible Wounds of War. RAND Center for Military Health Policy Research: Santa Monica, CA.

US Veterans' Study (2008)

Mechanisms of Injury

	Injury with loss of consciousness (n=124)	Injury with altered mental status (n=260)	Other injury (n=435)	No injury (n=1706)
Blast or explosion	79%	72.7%	23.2%	-
Bullet	4.8%	0.8%	1.6%	-
Fragment or shrapnel	25%	18.5%	8%	-
Fall	30.6%	28.1%	43.7%	-
Vehicle accident	30.6%	18.1%	13.3%	-
Other	12.9%	8.8%	33.8%	-

Hoge CW, McGurk D, et al. (2008). Mild traumatic brain injury in US soldiers returning from Iraq. *N Engl J Med*; 358(5): 453-63.

US Veterans' Study (2008)

	Injury with loss of consciousness (n=124)	Injury with altered mental status (n=260)	Other injury (n=435)	No injury (n=1706)
PTSD	44%	27%	16%	9%
Depression	23%	8%	7%	≥ 3%

Hoge CW, McGurk D, et al. (2008). Mild traumatic brain injury in US soldiers returning from Iraq. *N Engl J Med*; 358(5): 453-63.

Vietnamese
Ex-Political
Detainee
Story



Vietnamese
Ex-Political
Detainee
Story



Demographics of Study Participants

Variable	Control (n=82)	Ex-Detainees (n=337)	P-value	Ex-Detainees w/o THI (n=210)	Ex-Detainees w/ THI (n=127)	P-value
Age	62.4	60.5	.26	61.2	59.4	.10
Marital Status (%)						
•Married	75.6	79.8	.011	81	78	.012
•Div/Sep	9.8	13.4		11	17.3	
•Widowed	4.9	4.7		4.8	4.7	
•Single	9.4	2.1		3.3	0	
Years of Education	8.6	11.2	<.001	11.5	10.9	<.001

Mollica, R. F., Chernoff, M. C., Berthold, S. M., Lavelle, J., Lyoo, I. K., & Renshaw, P. (2014). The mental health sequelae of traumatic head injury in South Vietnamese ex-political detainees who survived torture. *Comprehensive psychiatry*, 55(7), 1626-1638.

Trauma and Torture Histories

Variable	Control (n=82)	Ex-Detainee (n=337)	P-value	Ex-Detainees w/o THI (n=210)	Ex-Detainees w/ THI (n=127)	P-value
Years in Re-education Camps (Mean)	N/A	6.5	N/A	6.6	6.3	.549
# Trauma Events (Median)	1	13	<.001	12	15	<.001
# Torture Events (Median)	0	7	<.001	6	10	<.001
# Events of Torture and Trauma (Median)	1	20	<.0001	17.5	25	<.0001

Mollica, R. F., Chernoff, M. C., Berthold, S. M., Lavelle, J., Lyoo, I. K., & Renshaw, P. (2014). The mental health sequelae of traumatic head injury in South Vietnamese ex-political detainees who survived torture. *Comprehensive psychiatry*, 55(7), 1626-1638.

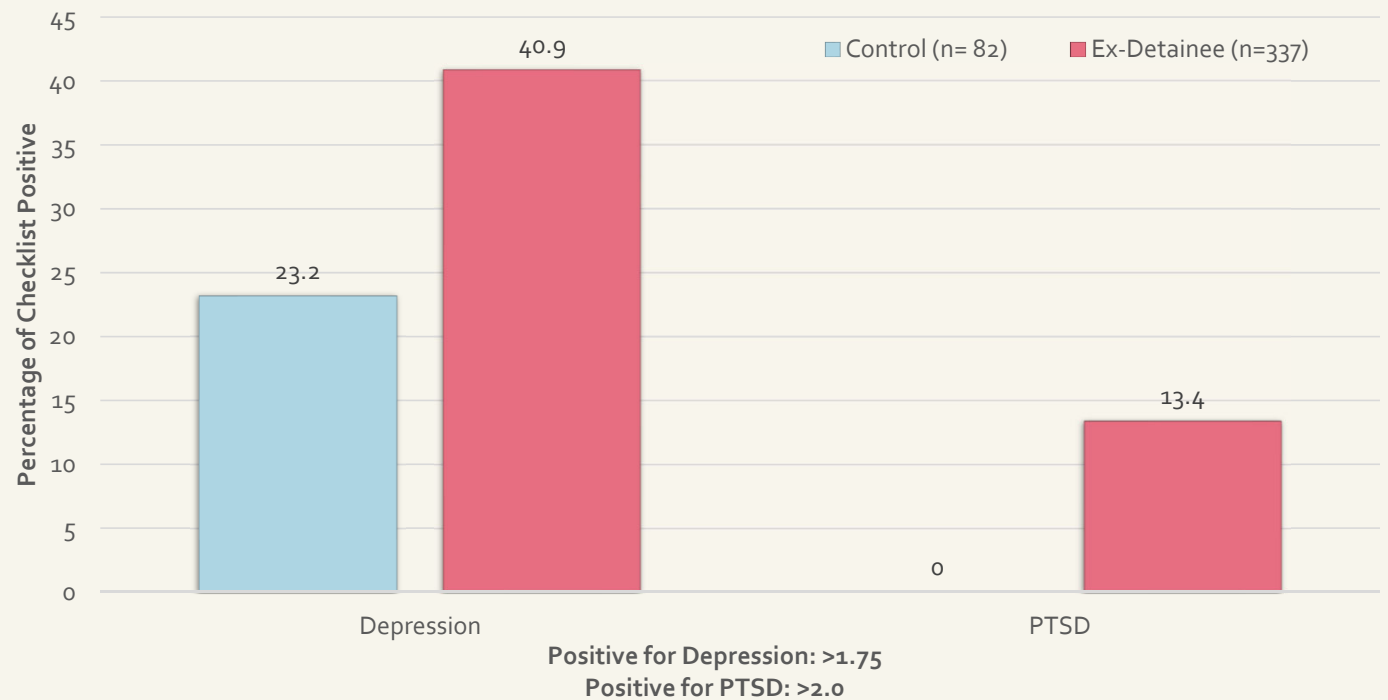
The Number and Percent of Vietnamese Ex-Political Detainees Reporting Each Type of Head Injury Across Time

Type of Head Injury	Ex-Political Detainees (N=337)	
	N	%
Explosion	158	46.88
Beaten on head	68	20.18
Shrapnel	58	17.21
Fall for other reason	55	16.32
Suffocation	47	13.95
Fall out of vehicle	40	11.87
Fall from fatigue	36	10.68
Hit head against dashboard	19	5.64
Work accident	15	4.45
Drowning	9	2.67
Whiplash	9	2.67
Shot in head	7	2.08
Strangulation	6	1.78
Other head injury	5	1.48
Hit by vehicle	3	0.89
Hit head while trying to escape from camp	2	0.59

Mollica, R. F., Chernoff, M. C., Berthold, S. M., Lavelle, J., Lyoo, I. K., & Renshaw, P. (2014). The mental health sequelae of traumatic head injury in South Vietnamese ex-political detainees who survived torture. *Comprehensive psychiatry*, 55(7), 1626-1638.

Depression and PTSD in Ex-Political Detainees vs. Controls

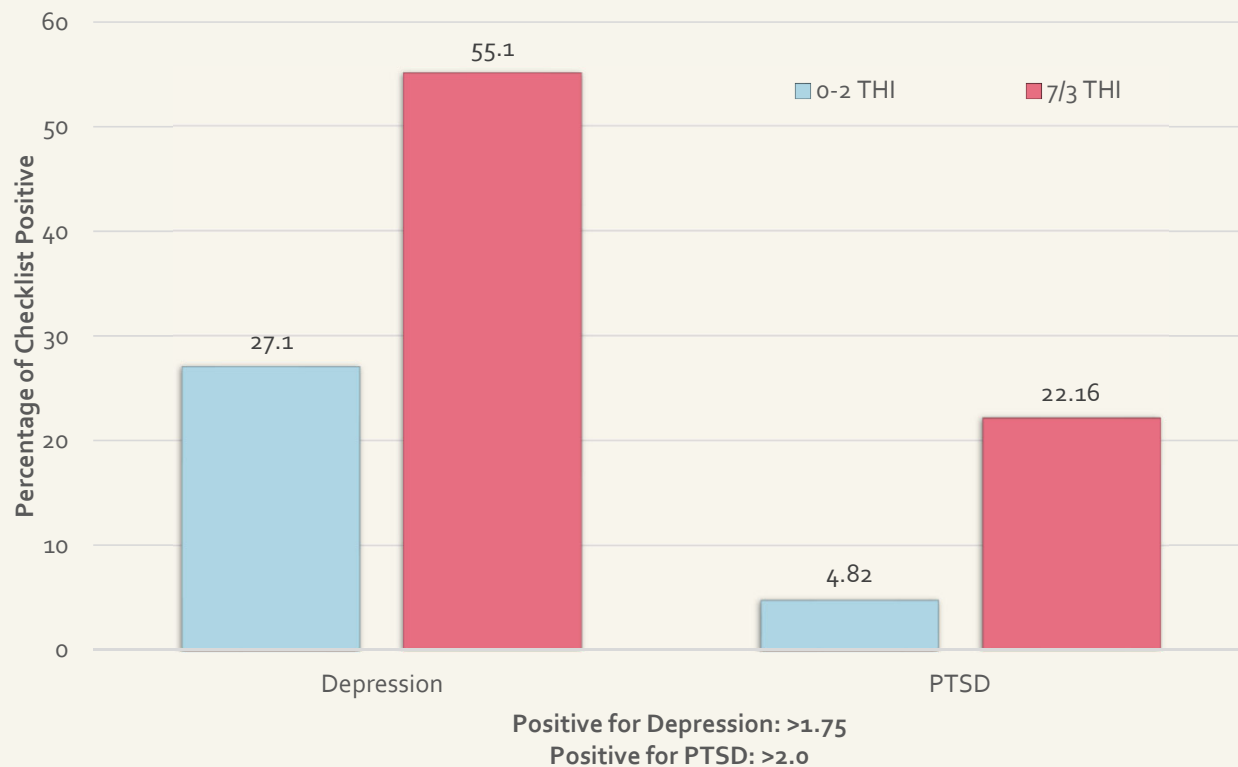
Depression and PTSD in Ex-Political Detainees vs. Controls



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Depression and PTSD in Ex-Political Detainees with THI

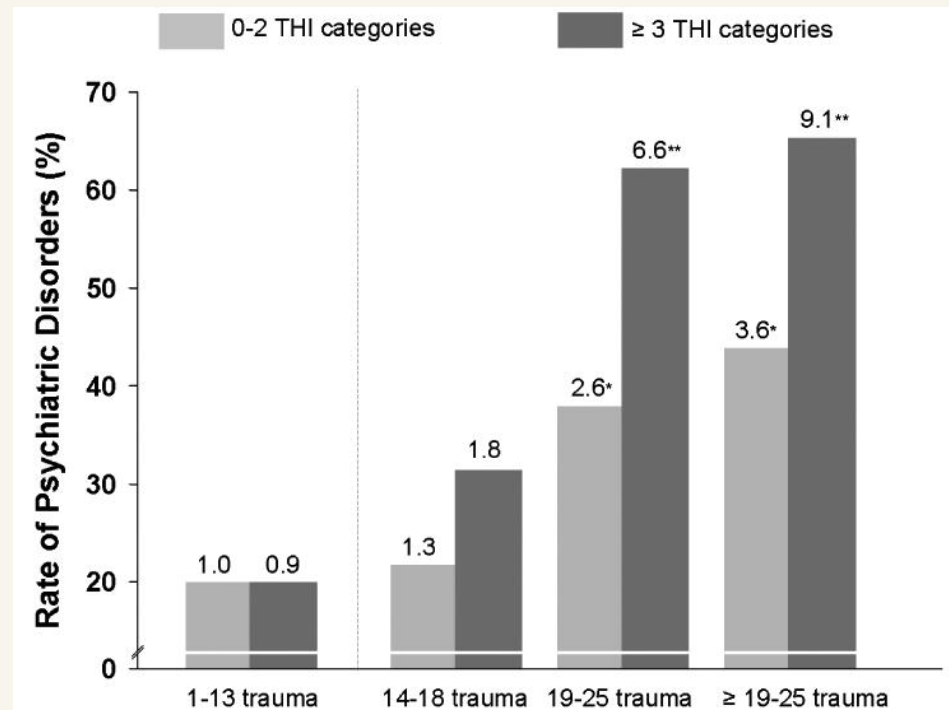
Depression and PTSD in Ex-Political Detainees with THI (n=337)



Mollica, R. F., Chernoff, M. C., Berthold, S. M., Lavelle, J., Lyoo, I. K., & Renshaw, P. (2014). The mental health sequelae of traumatic head injury in South Vietnamese ex-political detainees who survived torture. *Comprehensive psychiatry*, 55(7), 1626-1638.

Psychiatric Morbidity in Ex-Political Detainees' Additive Impact of THI

Frequency of Traumatic Head Injury Events and Trauma/Torture Events Associated with Psychiatric Disorders



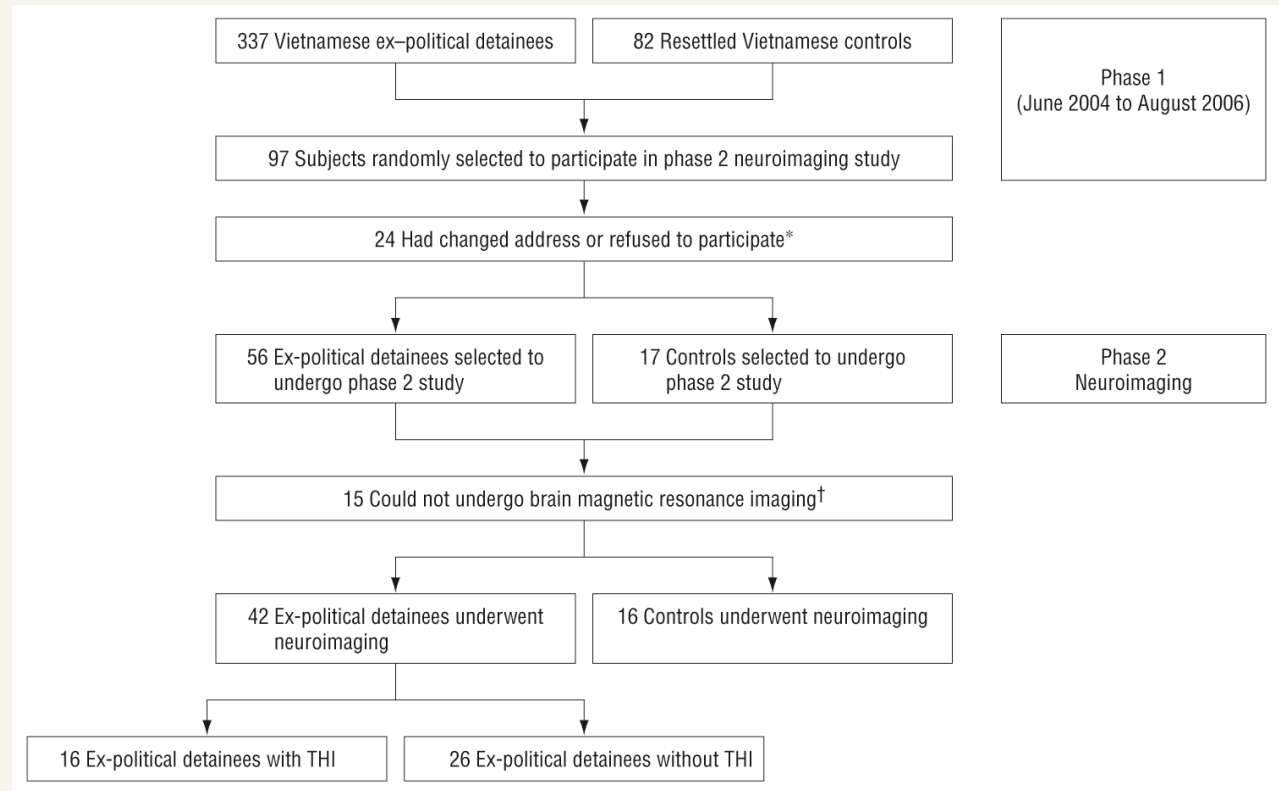
Mollica, R. F., Chernoff, M. C., Berthold, S. M., Lavelle, J., Lyoo, I. K., & Renshaw, P. (2014). The mental health sequelae of traumatic head injury in South Vietnamese ex-political detainees who survived torture. *Comprehensive psychiatry*, 55(7), 1626-1638.



Neuroimaging MRI Study – Vietnamese Study Definition

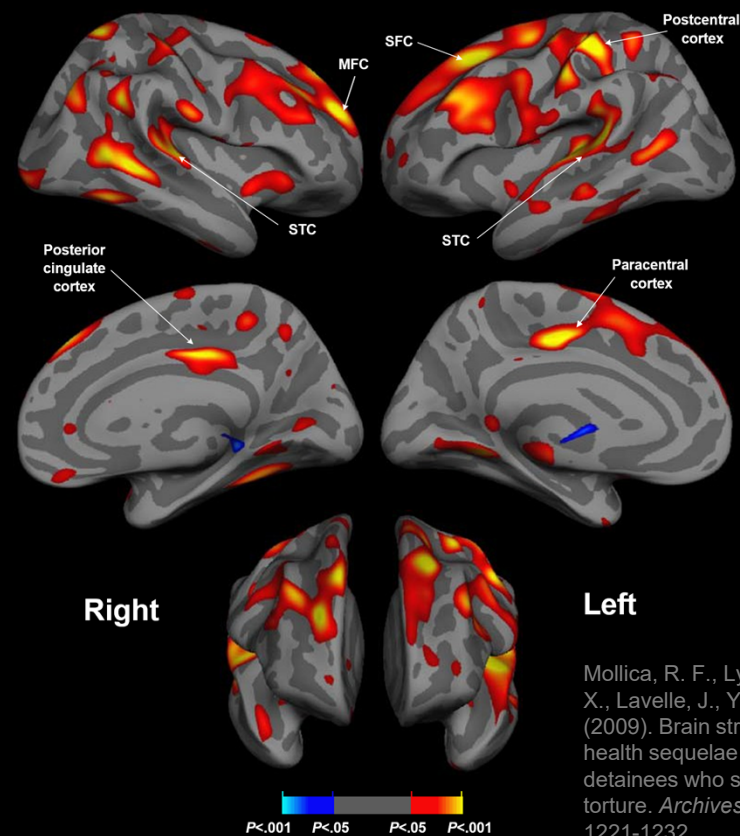
We considered a participant to be head- injured if they reported at least one head injury during any time period. However, to qualify, the head injury had to be associated with memory problems, loss of consciousness, and a least one other neurological symptom (e.g., trouble walking, talking, thinking, seeing or feeling ill).

Participant Flow Through a Large-Scale Epidemiologic Survey Of Vietnamese Ex-Political Detainees And Non-Traumatized Controls



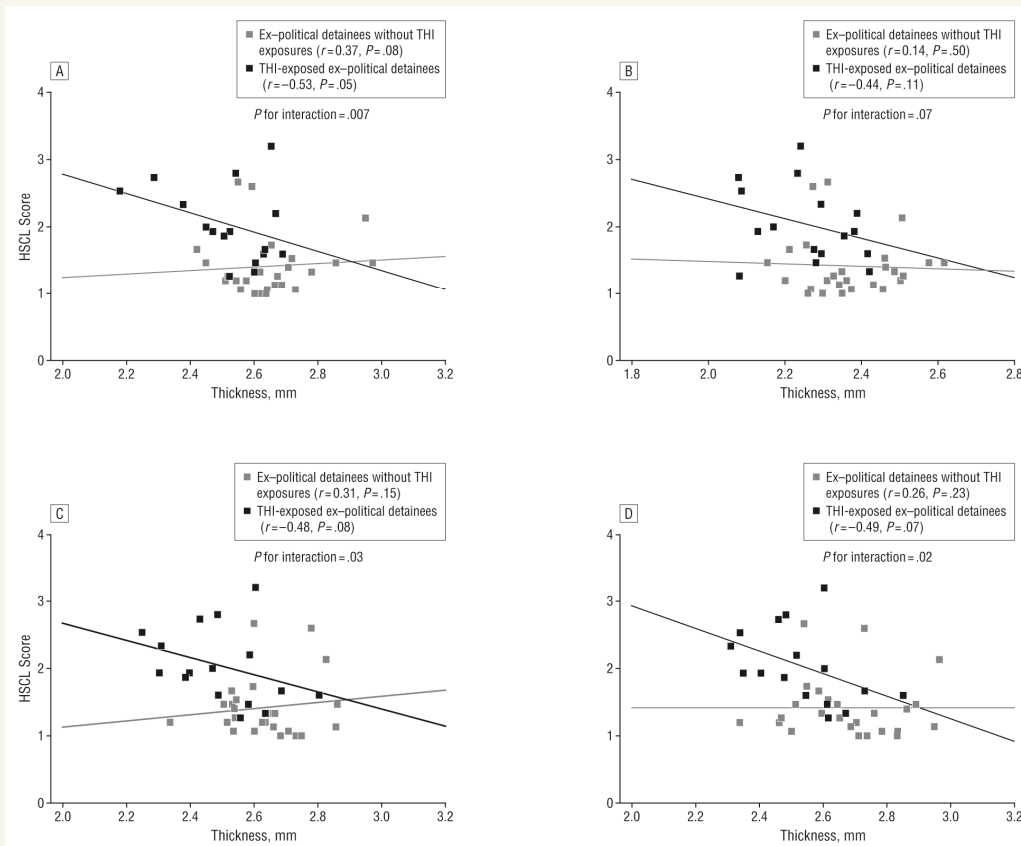
Mollica, R. F., Lyoo, I. K., Chernoff, M. C., Bui, H. X., Lavelle, J., Yoon, S. J., ... & Renshaw, P. F. (2009). Brain structural abnormalities and mental health sequelae in South Vietnamese ex-political detainees who survived traumatic head injury and torture. *Archives of General Psychiatry*, 66(11), 1221-1232.

Statistical
Thickness
Difference Maps
Between
THI-Exposed
Ex-political
Detainees and
Ex-Political
Detainees Who
Had Not
Experienced THI



Mollica, R. F., Lyoo, I. K., Chernoff, M. C., Bui, H. X., Lavelle, J., Yoon, S. J., ... & Renshaw, P. F. (2009). Brain structural abnormalities and mental health sequelae in South Vietnamese ex-political detainees who survived traumatic head injury and torture. *Archives of General Psychiatry*, 66(11), 1221-1232.

Relationship Between Severity of Depression Measured by the Hopkins Symptom Checklist-25 (HSCL) and Cortical Thickness of Brain Regions that were Related to THI in Each Ex-Political Detainee Group



- A. Left superior frontal cortex
- B. left middle frontal cortex
- C. left superior temporal cortex
- D. right superior temporal cortex

Mollica, R. F., Lyoo, I. K., Chernoff, M. C., Bui, H. X., Lavelle, J., Yoon, S. J., ... & Renshaw, P. F. (2009). Brain structural abnormalities and mental health sequelae in South Vietnamese ex-political detainees who survived traumatic head injury and torture. *Archives of General Psychiatry*, 66(11), 1221-1232.



Summary – Neuroimaging MRI Study

Vietnamese ex-political detainees with THI has cortical thinning in the following brain areas:

- Left superior frontal cortex (SFC)
- Left middle frontal cortex (MFC)
- Left superior temporal cortex (STC)
- Right superior temporal cortex (STC)
- Right posterior cingulate cortex (PCC)
- Left paracentral cortex

Vietnamese ex-political detainees with trauma/torture had cortical thinning in the following brain area:

- Amygdala volume loss
-

Prevalence of THI in SOT Programs

New York University/
Bellevue Program for
Survivors of Torture
(PSOT) Study
(2008-2011)

Males = 304, 62.3%
Average Age: 35.7

TABLE 1 *Participant characteristics*

	N = 488 %	
Region of origin		
West Africa	146	29.9
East Asia	94	19.3
Central Africa	84	17.2
South Asia	57	12.0
Eastern Europe	46	9.4
Americas	18	3.7
Western Europe	18	3.7
Middle East	11	2.3
Africa, other	11	2.3
Other	3	.1
Religion		
Muslim	172	35.2
Christian	165	33.8
Buddhist	116	23.8
Jewish	9	1.8
Other	26	5.3
Torture category		
United States definition	250	51.2
United Nations definition	192	39.3
World Medical Association definition	46	9.4
Proficient in English	185	37.9

Keatley, E., Ashman, T., Im, B., & Rasmussen, A. (2013). Self-reported head injury among refugee survivors of torture. *The Journal of Head Trauma Rehabilitation, 28*(6), E8-E13.


Prevalence of THI in SOT Programs

New York University/
Bellevue Program for
Survivors of Torture
(PSOT) Study
(2008-2011)

Total n=488	n=	%
Head injury with loss of consciousness	185	37.9
Head injury without loss of consciousness	150	30.7
No head injury	153	31.3

- “Among the treatment-seeking survivors of torture in this sample, 69% reported sustaining a blow to the head as a result of torture.”
- Reported headaches and sleep disturbances.
- THI/TBI can be a major barrier to recovery.

Keatley, E., Ashman, T., Im, B., & Rasmussen, A. (2013). Self-reported head injury among refugee survivors of torture. *The Journal of Head Trauma Rehabilitation*, 28(6), E8-E13.



The Silent Epidemic of Domestic Violence (DV) and TBI

- One in four women experience severe violence from a domestic partner.
- 75% experience a single or repeated traumatic brain injuries.
- Most DV-TBI go unreported.

Source: <https://www.americanbrainfoundation.org/domestic-violence-and-traumatic-brain-injury-the-chilling-truth-of-this-hits-home/>

Impact of THI/TBI

Five-year outcomes of persons with TBI*



*Data are US population estimates based on the TBIMS National Database. Data refer to people 16 years of age and older who received inpatient rehabilitation services for a primary diagnosis of TBI.

Source: <https://www.cdc.gov/traumaticbraininjury/moderate-severe/index.html>

Impact of THI/TBI

Long-term negative effects of TBI are significant.

Even after surviving a moderate or severe TBI and receiving inpatient rehabilitation services, a person's life expectancy is 9 years shorter. TBI increases the risk of dying from several causes. Compared to people without TBI, people with TBI are more likely to die from:



SEIZURES

50 x more likely



DRUG POISONING

11 x more likely



INFECTIONS

9 x more likely



PNEUMONIA

6 x more likely

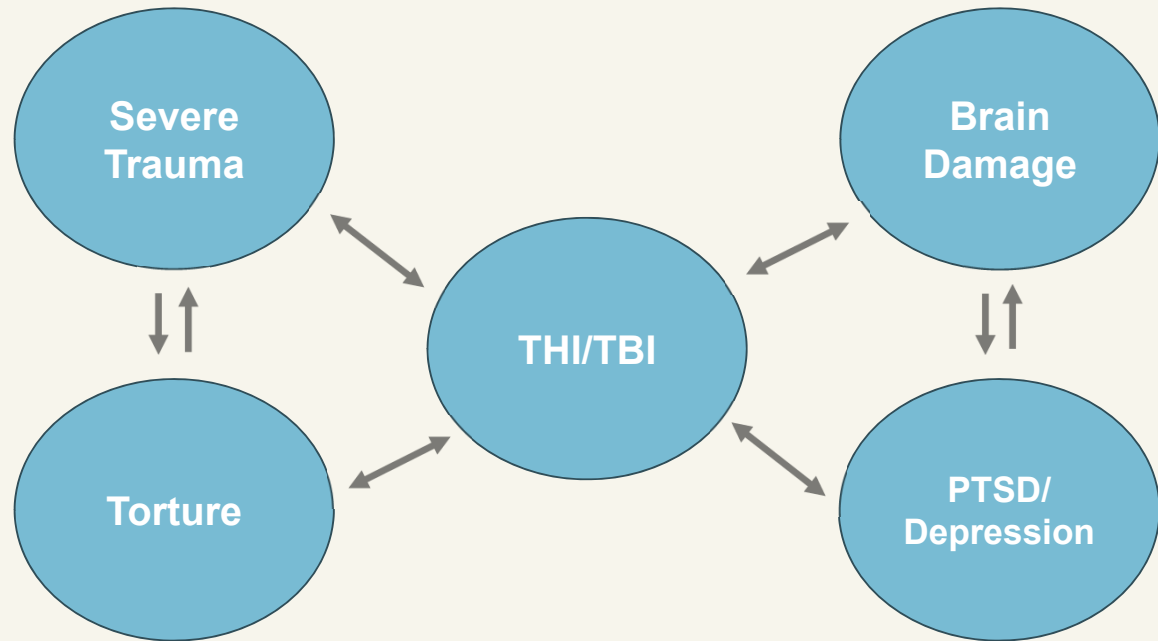
Source: <https://www.cdc.gov/traumaticbraininjury/moderate-severe/index.html>



Conclusion

Traumatic Head Injury (THI)/Traumatic Brain Injury (TBI) is one of the most common and least recognized medical/mental health problems in survivors of torture.

Conclusion



Traumatic Head Injury (THI)/Traumatic Brain Injury (TBI) and severe trauma are highly associated, leading to severe cognitive deficits, mental health disorders, and major physical and social disabilities.



Next
Presenter



Altaf Saadi,
MD MSc

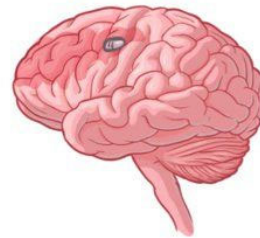
Not all head injuries are traumatic brain injuries

HEAD TRAUMA → TEMPORARY or PERMANENT BRAIN DYSFUNCTION
TRAUMATIC BRAIN INJURY (TBI)

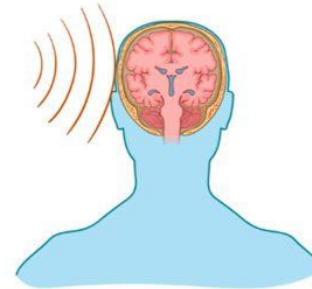
BLUNT IMPACT



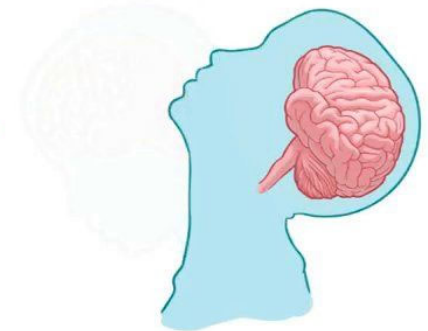
PENETRATING INJURY



BLAST WAVE



ACCELERATING-DECELERATING FORCE



Traumatic Brain Injury

CDC defines TBI as a “disruption in the normal function of the brain** that can be caused by a bump, blow, or jolt to the head or a penetrating head injury.”**

- Observing one of the following clinical signs constitutes an alteration in brain function:



Any period of loss
of or decreased
consciousness



Any loss of memory:
- retrograde amnesia
- post-traumatic
amnesia



Alterations in mental
status



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Neurological deficits

Source: Asylum Medicine Training Initiative Module 8

Not all brain injuries are traumatic brain injuries



Source: MobileODT FemTech Co



TBI Severity

Mild:

- Loss of consciousness (LOC) <30 minutes (can involve no LOC at all but an alteration in consciousness)
- Post-traumatic amnesia <24 hours

Moderate-severe:

- LOC >30 min
- Post-traumatic amnesia >24 hours

TBI Symptoms

Somatic

Vestibular
Nausea
Headache



Sleep issues



Photophobia

Affective

Anxious
Impulsivity



Depression



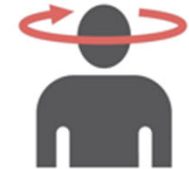
Emotional lability

Cognitive

Difficulty
concentrating



Inattention



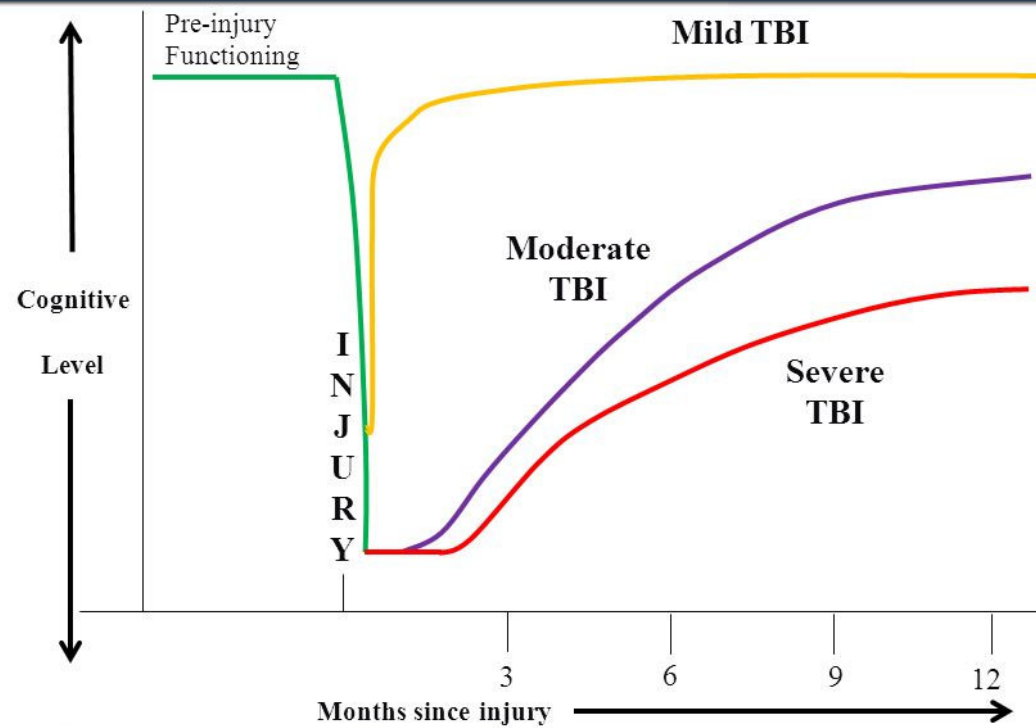
Disorientation

ASYLUM MEDICINE TRAINING INITIATIVE

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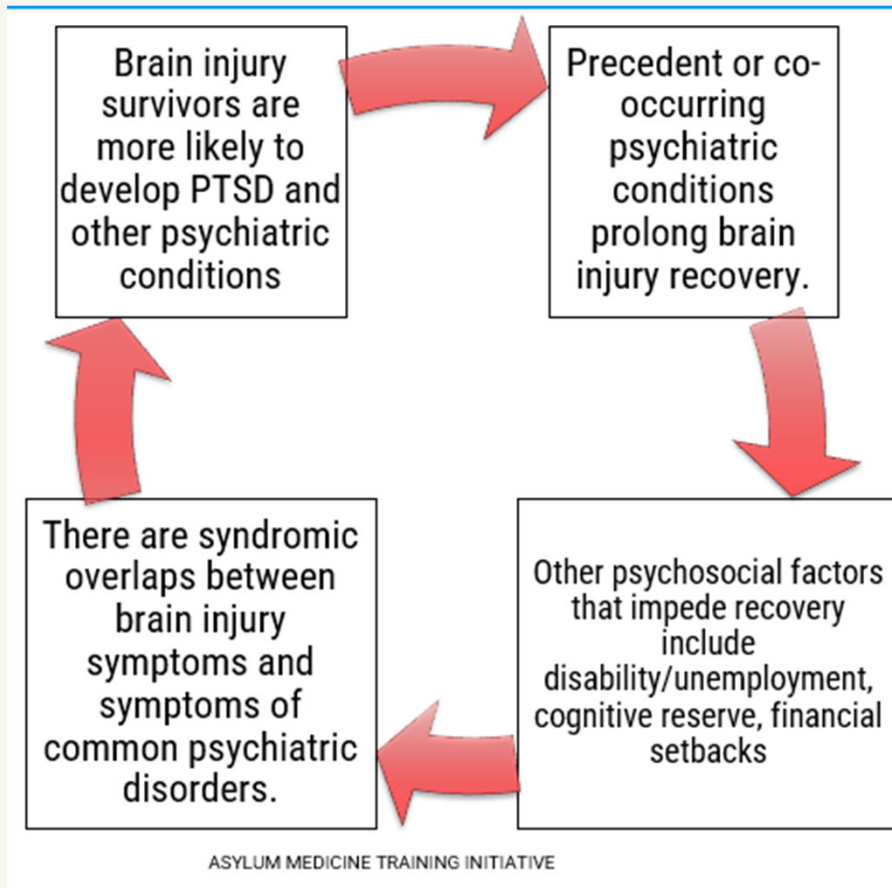
TBI Recovery

Cognitive Recovery by TBI Severity



Source: McKenzie-Hartman (2013), traumatic brain injury assessment and care are critical components of the DVBC model.

TBI and Psychosocial Factors



Ohio State University TBI Identification Method

Ohio State University TBI Identification Method — Interview Form

Step 1

Ask questions 1-5 below. Record the cause of each reported injury and any details provided spontaneously in the Chart at the bottom of this page. You do not need to ask further about loss of consciousness or other injury details during this step.

I am going to ask you about injuries to your head or neck that you may have had anytime in your life.

1. In your lifetime, have you ever been hospitalized or treated in an emergency room following an injury to your head or neck? Think about any childhood injuries you remember or were told about.

No Yes—Record cause in chart

2. In your lifetime, have you ever injured your head or neck in a car accident or from crashing some other moving vehicle like a bicycle, motorcycle or ATV?

No Yes—Record cause in chart

3. In your lifetime, have you ever injured your head or neck in a fall or from being hit by something (for example, falling from a bike or horse, rollerblading, falling on ice, being hit by a rock)? Have you ever injured your head or neck playing sports or on the playground?

No Yes—Record cause in chart

4. In your lifetime, have you ever injured your head or neck in a fight, from being hit by someone, or from being shaken violently? Have you ever been shot in the head?

No Yes—Record cause in chart

5. In your lifetime, have you ever been nearby when an explosion or a blast occurred? If you served in the military, think about any combat- or training-related incidents.

No Yes—Record cause in chart

Interviewer Instruction:

If the answers to any of the above questions are "yes," go to Step 2. If the answers to all of the above questions are "no,"

Step 2

Interviewer Instruction: If the answer is "yes" to any of the questions in Step 1 ask the following additional questions about each reported injury and add details to the Chart below.

Were you knocked out or did you lose consciousness (LOC)?

If yes, how long?

If no, were you dazed or did you have a gap in your memory from the injury?

How old were you?

Step 3

Interviewer Instruction: Ask the following questions to help identify a history that may include multiple mild TBIs and complete the Chart below.

Have you ever had a period of time in which you experienced multiple, repeated impacts to your head (e.g. history of abuse, contact sports, military duty)?

If yes, what was the typical or usual effect—were you knocked out (Loss of Consciousness - LOC)?

If no, were you dazed or did you have a gap in your memory from the injury?

What was the most severe effect from one of the times you had an impact to the head?

How old were you when these repeated injuries began? Ended?

Step 1 Cause	Step 2 Loss of consciousness (LOC)/knocked out				Dazed/Mem Gap		Age
	No LOC	< 30 min	30 min-24 hrs	> 24 hrs	Yes	No	

If more injuries with LOC: How many? _____ Longest knocked out? _____ How many ≥ 30 mins.? _____ Youngest age? _____

Step 3 Cause of repeated Injury	Typical Effect		Most Severe Effect			Age		
	Dazed/ memory gap, no LOC	LOC	Dazed/ memory gap, no LOC	LOC < 30 min	LOC 30 min - 24 hrs.	LOC > 24 hrs.	Began	Ended

Source: The OSU TBI Identification Method, adapted from Corrigan and Bogner's (2007) study, demonstrated initial reliability and validity.

HELPS Screening Tool

H

Have you ever Hit your Head or been Hit on the Head?

- This question should include any potential incidents that may have occurred at any age.

E

Were you ever seen in the Emergency room, hospital, or by a doctor because of an injury to your head?

- There is recognition that not all individuals with a serious head injury can afford or seek hospital-based care.

L

Did you ever Lose consciousness or experience a period of being dazed and confused because of an injury to your head?

- An alteration in consciousness

P

Do you experience any of these Problems in your daily life since you hit your head?

- Headaches Anxiety Difficulty concentrating Difficulty reading, writing, calculating Poor judgment Changes in relationships
- Dizziness Depression Difficulty remembering Difficulty performing at job/school work Poor problem solving

S

Any significant Sicknesses?

- To rule out other causes of acquired brain injury (e.g., brain tumor, meningitis, etc.)

The original HELPS TBI screening tool was developed by M. Picard, D. Scarisbrick, R. Paluck, 9/91, International Center for the Disabled, TBI-NET, U.S. Department of Education, Rehabilitation Services Administration, Grant #H128A00022.

Symptom Checklists

- Glasgow Coma Scale
- Neurobehavioral Symptom Inventory
- Rivermead Post-Concussion Symptom Scale
- Post-Concussion Symptom Scale
- Standardized Assessment of Concussion

RIVERMEAD POST-CONCUSSION SYMPTOMS QUESTIONNAIRE (RPQ)

Patient _____ DOI _____ Today's Date _____

After a head injury or accident some people experience symptoms which can cause worry or nuisance. We would like to know if you now suffer any of the symptoms listed below. Compare yourself now with how you were before the accident and circle the number closest to your answer.

- 0 = Not experienced at all before or after the accident
- 1 = No more of a problem now than before the accident
- 2 = A mild problem for me now
- 3 = A moderate problem for me now
- 4 = A severe problem for me now

0	1	2	3	4	Headaches
0	1	2	3	4	Dizzy feelings
0	1	2	3	4	Nausea, upset stomach or vomiting
0	1	2	3	4	Noise sensitivity, or easily upset by loud noises
0	1	2	3	4	Sleep disturbance or disruption of sleep patterns
0	1	2	3	4	Fatigue, tiring more easily
0	1	2	3	4	Being irritable, easily annoyed or angered
0	1	2	3	4	Feeling depressed, tearful, crying easily or more emotional
0	1	2	3	4	Getting frustrated easily or being less patient with others
0	1	2	3	4	Poor memory or forgetting things
0	1	2	3	4	Difficulty concentrating
0	1	2	3	4	Taking longer to think
0	1	2	3	4	Blurry vision
0	1	2	3	4	Bright lights irritate or upset me, sensitive to bright lights
0	1	2	3	4	Double vision
0	1	2	3	4	Restlessness, have to move around, can't sit still
0	1	2	3	4	Other _____

Cognitive Screening


- Montreal Cognitive Assessment (recognizing multiple versions, MOCA-B)
- St. Louis University Mental Status Exam (SLUMS)
- Rowland Universal Dementia Assessment Scale (RUDAS)

****Recognize inherent limitations in cognitive screening, need for adjustments, assessing across multiple cognitive domains, and potential need for neurologic or neuropsychological assessment.**

Table 1: The Rowland Universal Dementia Assessment Scale

Cognitive domain	Question*	Points
Registration	Given 4 grocery items to register (and recall later)	0
Visuospatial orientation	Left/right orientation with body parts	5
Praxis	Alternating hand movements with fist and palm	2
Visuoconstructional drawing	Copying image of a cube	3
Judgment	Safety precautions when crossing a street	4
Memory recall	Recalling 4 grocery items from above	8
Language	Animal naming in 1 minute	8
Total score		/30

*Questions have been abridged. The full test and details are available at https://fightdementia.org.au/sites/default/files/20110311_2011RUDASAdminScoringGuide.pdf.



Major and Minor Cognitive Disorder

Major Neurocognitive Disorder

- **Criterion A:** Significant cognitive decline
- **Criterion B:** Interferes with independence
- **Criterion C:** Not due to delirium
- **Criterion D:** Not due to other mental disorders

Minor Neurocognitive Disorder

- **Criterion A:** Moderate cognitive decline
 - **Criterion B:** Does not interfere with independence
 - **Criterion C:** Not due to delirium
 - **Criterion D:** Not due to other mental disorders
-



Imaging

The overwhelming majority of patients with mild brain injury show no imaging abnormality, either on CT or MRI.



Workflow

History Taking

1. Screening for brain injury
2. Assessing symptoms and functional assessment
3. Assessing psychosocial factors affecting recovery
4. Physical and psychiatric history
5. Obtain collateral, if possible

Examination

1. Observe for behavioral clues even before formal examination
2. Psychological Exam
3. Neurological Exam
4. Physical exam focusing on head and neck

Refer, if needed

1. Neurology
2. Neuropsychology
3. Cognitive Rehab (SLP, OT)
4. Vestibular PT

Disability Exemption for Citizenship N-648



You must include each element of **DONE** in order to successfully complete the form for your patient:

- **DIAGNOSIS:** The nature of the illness or disability described in lay terms, as if you are describing it to a middle school student
- **ORIGIN:** The origin of the disability or illness described in lay terms
- **NEXUS:** the specific symptoms associated with the disability or illness that make it impossible for the applicant to learn English and/or U.S. Civics;
- **EFFECT:** your conclusion that the applicant cannot learn English and/or U.S. Civics.

In addition:

1. Provide specific examples of the way in which your patient's symptoms affect cognitive functioning. Clearly state whether the disability affects the patient's ability to learn English, civics, or both.
2. Use clear and unequivocal language, e.g. "As a result of his disabilities, Mr. X will not be able to learn English or civics sufficiently to pass the citizenship exam."

- **POST TRAUMATIC STRESS DISORDER AND DEPRESSION:** Ms. D suffers from major depression, recurrent and severe, with a history of suicidal ideation resulting in multiple in-patient psychiatric hospitalizations. Ms. D currently receives medication and treatment for depression to control the desire to harm herself. She does not pose a threat to others. She also has been diagnosed with Post Traumatic Stress Disorder related to war trauma in Bosnia which persists through nightmares and flashbacks.
- **DEMENTIA:** The patient has severe dementia. Dementia is the loss of intellectual functioning which is significant enough to interfere with daily life. It is not caused by depression or mental illness. It progressively worsens over time and is irreversible. It is present in Ms. N. in the form of forgetfulness, impairments in understanding, reasoning, learning and language.



MGH Center for Immigrant Health

Disability
Exemption for
Citizenship
N-648

Eligibility




Must be **unable** to meet the English and civics requirements due to a **medically determinable** physical or developmental disability or mental impairment that has lasted, or is expected to last, at least **12 months**

- there must be a **nexus** between the diagnosis and the inability to learn English/civics
- age on its own is not sufficient
- illiteracy is not sufficient (and mentioning is usually counterproductive)



Introduction to US Citizenship & Medical Disability Waivers




Traumatic Brain Injury Additional References

- Saadi A, Williams J, Parvez A, Alegría M, Vranceanu AM. Head Trauma in Refugees and Asylum Seekers: A Systematic Review. *Neurology*. 2023 05 23; 100(21):e2155-e2169. PMID: 37019660; PMCID: PMC10238158.
- Saadi A, Anand P, Kimball SL. Traumatic brain injury and forensic evaluations: Three case studies of U.S. asylum-seekers. *J Forensic Leg Med*. 2021 Apr;79:102139. doi: 10.1016/j.jflm.2021.102139. Epub 2021 Mar 11. PMID: 33740607 DOI: 10.1016/j.jflm.2021.102139
- Saadi A., Khoury M., Dietiker C., Mass A., Jacquemet N., & Kuhn T. (2022). Module 8: Traumatic Brain Injury. In Emery E., DeFries T. *Asylum Medicine Training Initiative: Asylum Medicine Introductory Curriculum*.
<https://asylummedtraining.org/module-8>

Disability Exemption for Citizenship N-648 Additional Resources

- EthnoMed: <https://ethnomed.org/resource/disability-exception-for-citizenship-n-648/>
 - MGH Center for Immigrant Health Webinar:
<https://youtu.be/omfszOd6fdU?si=t7V8iYsosPtCWKCB>
-



Traumatic Brain Injury Additional References

- Eitinger, L. (1961). Pathology of the concentration camp syndrome: Preliminary report. *Archives of General Psychiatry*, 5(4), 371-379.
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- Hoge CW, McGurk D, et al. (2008). Mild traumatic brain injury in US soldiers returning from Iraq. *N Engl J Med*; 358(5): 453-63.
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- Keatley, E., Ashman, T., Im, B., & Rasmussen, A. (2013). Self-reported head injury among refugee survivors of torture. *The Journal of Head Trauma Rehabilitation*, 28(6), E8-E13.



Questions?

Please add your questions to the Q&A and we will facilitate them to the presenters.

Have a questions after the presentation?

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Assessment and Treatment of Traumatic Brain/Head Injury in Survivors of Torture

February 8th, 2024

Thank you for attending this NCB webinar!



The National Capacity Building Project is a project of the Center for Victims of Torture in partnership with Harvard Program in Refugee Trauma and the National Consortium of Torture Treatment Programs.



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More resources are available at www.healtorture.org.

CVT's National Capacity Building Project received competitive funding through the U.S. Department of Health and Human Services, Administration for Children and Families, Grant #90ZT0214-02-00. The contents of this presentation are solely the responsibility of the authors and do not necessarily represent the official views of the U.S. Department of Health and Human Services, Administration for Children and Families.