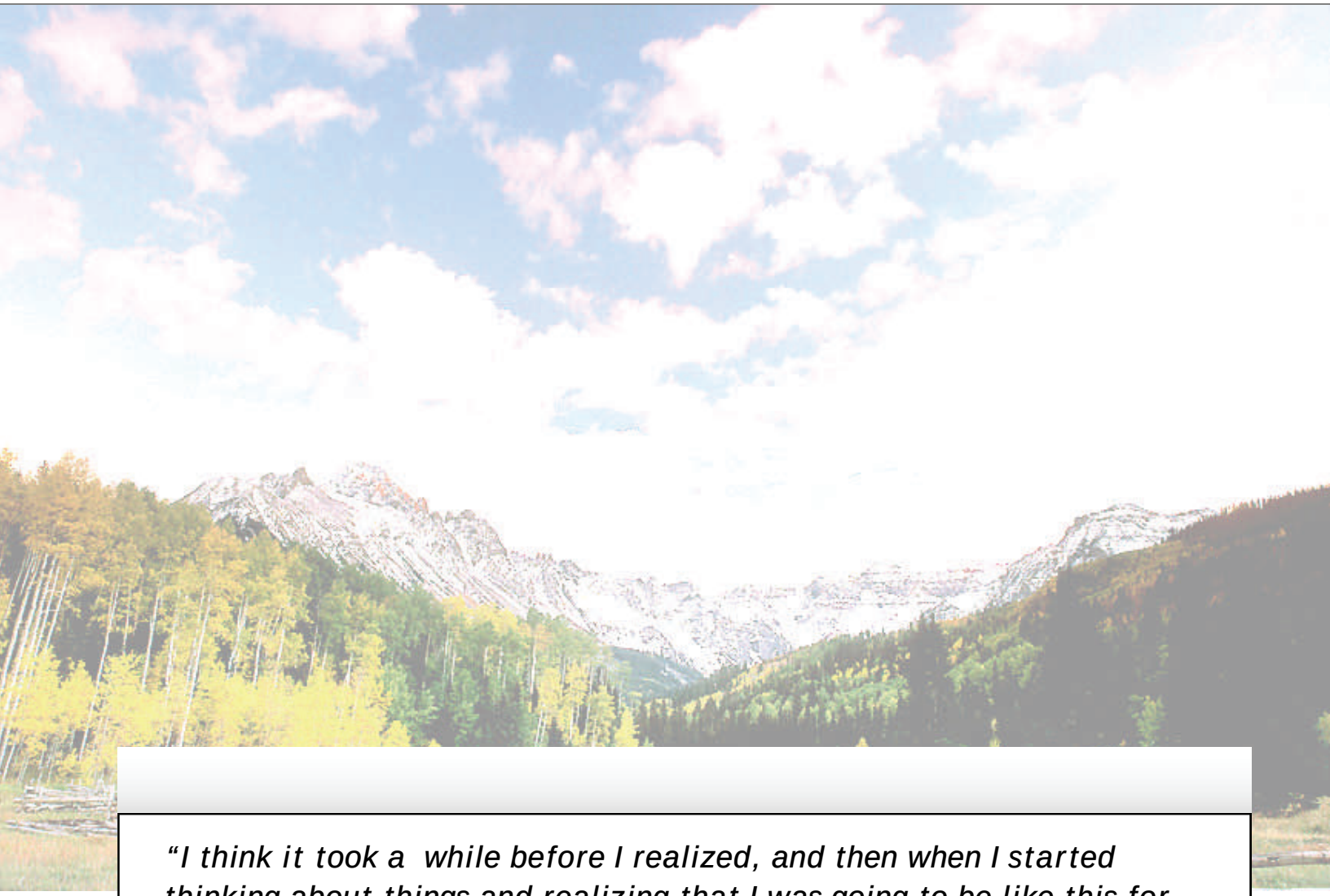
Traumatic Brain Injury and Suicide

Information and resources for clinicians



"I think it took a while before I realized, and then when I started thinking about things and realizing that I was going to be like this for the rest of my life, it gives me a really down feeling and it makes me think like—why should I be around like this for the rest of my life?"

- TBI Survivor

VISN 19 Mental Illness, Research, Education, and Clinical Center

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This clinicians' information guide was supported by a grant from the Colorado Traumatic Brain Injury (TBI) Trust Fund Education Program.

Disclaimer: This packet was designed to help guide clinicians in their work with TBI survivors who may be suicidal. However, the information contained herein is not exhaustive, and clinicians are encouraged to seek out additional resources as needed. This packet does not address all aspects of suicide or TBI.

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Introduction

There is a need for more resources that are specifically targeted toward TBI survivors who may be considering suicide.

Based upon this need, researchers at the VA VISN 19 Mental Illness Research, Education, and Clinical Center (MIRECC) produced this information guide and resources.

The target audience is clinicians and care providers working with TBI survivors.

This information guide includes:

1. Basic information regarding suicide and suicidal behavior
2. Basic information regarding traumatic brain injury
3. Findings regarding the increased risk for suicidal behavior post-TBI
4. Tools for inquiring about potential suicidal behavior
5. Treatment considerations based upon interviews (TBI survivors/family members) conducted by the authors
6. Further treatment considerations based upon the literature

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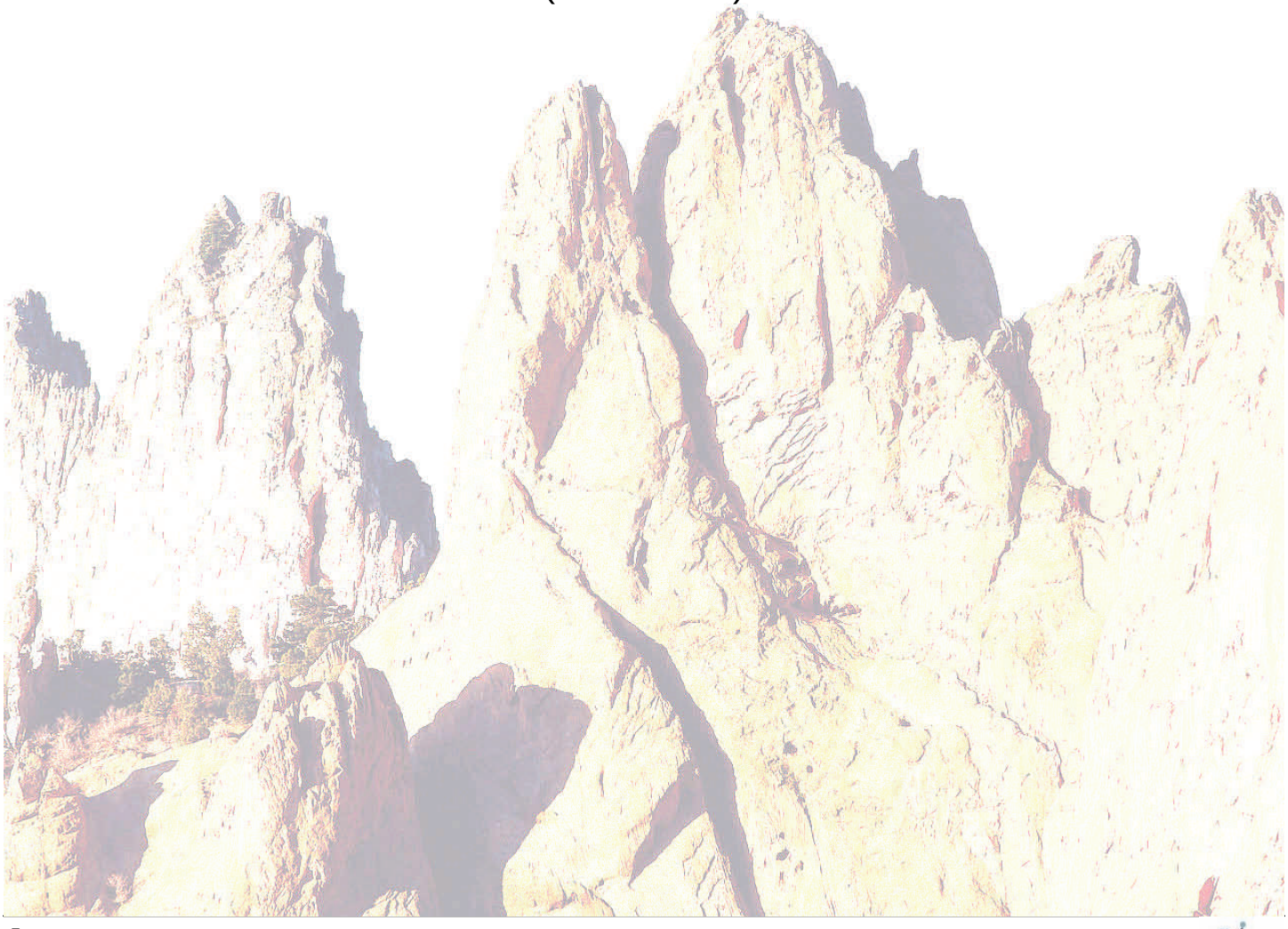
Section: Suicide

"The worst feeling is like there's nowhere else to go or nothing else to try."

(TBI Survivor)



Suicide: Definitions [1,2,3]

There is new a new classification system for terms related to suicidal behavior. These new terms and definitions are based on expert consensus.

Suicide-related ideation - Any thoughts of engaging in suicide-related behaviors, which are o*ffered in response to questioning* rather than spontaneously communicated. Can be with or without a plan. Can be with, without, or undetermined intent.

Suicide-related communications - Any *spontaneously* initiated communications regarding potential self-inflicted death. Intent is present or undetermined. This communication can be verbal or non-verbal and may or may not indicate a specific plan.

Suicidal behavior- A preparatory behavior or self-inflicted potentially injurious behavior for which there is *evidence of intent to die.*

Warning signs - The earliest detectable sign that indicates that there is a heightened risk for suicide within minutes, hours, or days. A warning sign refers to behaviors that the person shows (e.g. buying a gun) or statements that they make (e.g. “I would be better off dead”).

Risk factors - Common predictors of suicidal behavior. These include individual characteristics (e.g. age, gender), diagnoses (e.g. depression), and life events (e.g. divorce, unemployment).

Protective factors - Common predictors which counterbalance suicidal risk. Examples include social support, spirituality, and previous evidence of coping skills.

Suicide: Demographics

- Suicide is a major leading cause of death in the United States, accounting for approximately 32,000 deaths per year.[4]

- In the United States each year, white males account for approximately 74% of suicide deaths.[4]

- Suicide rates are the highest for older white males.[4]

- Men are 4 times as likely to die by suicide than women.[4]

- Veterans are twice as likely to die by suicide compared to nonveterans in the general.[5]

- A recent study established that among veterans, younger and older veterans are more prone to die by suicide than middle aged veterans.[6]

Suicide Risk Factors [7]

- Previous suicide attempt(s)
- Current ideation, intent, plan, access to means
- Family history of suicide
- Alcohol / substance abuse
- Recent discharge from an inpatient unit
- Current or previous history of psychiatric diagnosis
- Co-morbid health problems (e.g., a newly diagnosed problem or worsening symptoms)
- Impulsivity and poor self control
- Hopelessness - presence, duration, severity
- Recent losses - physical, financial, personal
- History of physical, sexual, or emotional abuse
- Same-sex sexual orientation
- Age, gender, race, social status (e.g., elderly or adult, unmarried, white, male, living alone)

Suicide Protective Factors [7]

- Life satisfaction
- Spirituality
- Sense of responsibility to family
- Children in the home
- Reality testing ability
- Positive social support
- Positive coping skills
- Positive problem-solving skills
- Positive therapeutic relationship

Suicide Warning Signs

The following suicide warning signs were developed by expert consensus.[2] These warning signs are highlighted on the VA Suicide Risk Assessment Guide which is presented in part on page 31. To date, warning signs specific to the population of TBI survivors have not been identified.

Signs that require immediate action and safety measures to be taken:

- Threatening to hurt or kill oneself
- Looking for ways to kill oneself: seeking access to pills, weapons, etc.
- Talking or writing about death, dying, or suicide

Signs to consider and that require attention, <u>especially</u> in the presence of any of the above signs or other known risk factors:

- Hopelessness
- Feeling trapped – like there's no way out
- Increased alcohol or drug use
- Dramatic changes in mood
- Withdrawing from family, friends, or society
- Anxiety, agitation, unable to sleep, or sleeping all the time
- Rage, anger, seeking revenge
- Acting reckless or engaging in risky activities, seemingly without thinking
- No reason for living; no sense of purpose in life

Section: Traumatic Brain Injury (TBI)

"The worst part is, with traumatic brain injury, people can't see it. And they see on the outside that I move around. I do this, and I do that, but they don't see the struggle inside: the memory loss, the struggles to remember, the struggles to forget." (TBI survivor)

TBI Definitions[8,9,10]

Traumatic Brain Injury (TBI):

A traumatic brain injury is a bolt or jolt to the head or a penetrating head injury that disrupts the function of the brain. Not all blows or jolts to the head result in a TBI. The severity of such an injury may range from mild (i.e., a brief change in mental status or consciousness) to severe (i.e., an extended period of unconsciousness or amnesia after the injury). A TBI can result in short- or long-term problems with independent function.

Types of Injuries:

Medical terms used to describe specific types of TBI:

- Subdural Hematoma
- Epidural Hematoma
- Diffuse Axonal Injury
- Blast Injury

Levels of severity:

Levels of TBI severity are measured through multiple means. Methods of measurement include an estimate of duration of altered or loss of consciousness (LOC) and/or post-traumatic amnesia (PTA), which is the period of time after the injury during which the TBI survivor is not able to form new memories. If medical care is sought, a tool called the Glasgow Coma Scale (GCS) may be used to assess level of acute injury.

The VA has advocated the following system of classification (Dept of Veterans Affairs, 2004):

- **Mild TBI**: A TBI with a Glasgow Coma Scale of 13-15, LOC of up to 30 minutes, PTA of up to 24 hours, no focal neurologic deficits, and no focal radiologic evidence of injury
- **Moderate TBI**: A TBI with a Glasgow Coma Scale of 9-12, LOC of up to 6 hours, PTA of up to 7 days, and abnormal radiologic findings
- **Severe TBI**: A TBI with a Glasgow Coma Scale of 3-8, LOC of more than 6 hours, PTA of more than 7 days, and abnormal radiologic findings

TBI: Demographics [8]

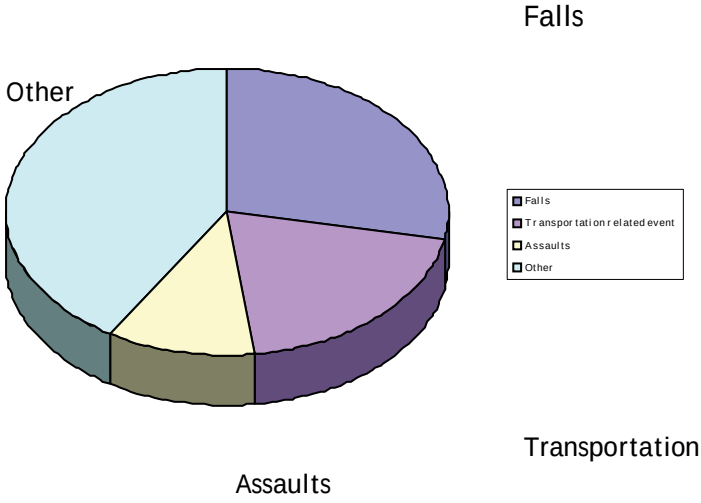
Each Year in the United States

- 1.4 million individuals sustain a TBI
- 50,000 die
- 235,000 are hospitalized
- 1.1 million are treated in the ER and released
- The majority of injuries sustained are classified as mild
- An unknown number of individuals receive no acute care
- 80,000—90,000 individuals experience a long-term disability as a result of TBI



Leading Causes of Civilian TBI [11]

- Falls (28%)
- Transportation related events (20%)
- Struck by/against events (19%)
- Assaults (11%)



TBI: Risk Factors [11,12,13]

The following have been identified as risk factors for sustaining a TBI:

- Age 15 to 19
- Alcohol and drug use
- Familial discord
- Low socio-economic status
- Unemployment
- African-American
- Male
- Antisocial behavior
- Athletic participation
- Combat experience
- History of previous brain injury

Common Enduring TBI Symptoms [14]

The majority of individuals with mild TBI return to baseline functioning within one year of injury.[15]

Cognition

Motor/sensory disturbances

Deficits in:

Language, communication

Attention, concentration, memory

Learning new information

Speed of information processing

Judgment, decision-making, problem-solving, insight

Mood

Apathy/Depression

Anxiety

Irritability

Emotional lability

Insensitivity

Egocentricity

Behavior

Lack of initiation

Disinhibition

Impulsivity

Restlessness

Aggression

Agitation

**The CDC estimates that at least 5.3 million Americans currently have a long-term or lifelong need for help to perform activities of daily living as a result of a TBI.*

Section: Suicide and TBI

"I had my heart set on it, and, for three days I just sat in my room and contemplated how to do this. And finally it got to the point where I tried…."

A TBI Survivor

Shared Risk Factors for TBI and Suicide:

Age

Male

Substance Use

Psychiatric Disorders

Aggressive Behavior

Suicide and TBI: Increased Risk

Having a TBI increases risk for suicidal behavior

In comparison to the general population,
TBI survivors are at increased risk for: [16,17,18]

Suicide Attempts

Suicide Deaths

Once a person has a TBI, some factors increase the risk for suicide

The risk of suicide attempts increases after a TBI if the individual also has post-injury psychiatric/ emotional disturbance and substance abuse problems.[19]

Why Might Those with TBI be at Increased Risk for Suicidal Behavior?

"It built up over a long period of time…problems that have been brewing over the last 20 or 30 years just finally kind of all added up together and you know, just kind of exploded…" (TBI Survivor)

Sustaining a TBI can be stressful

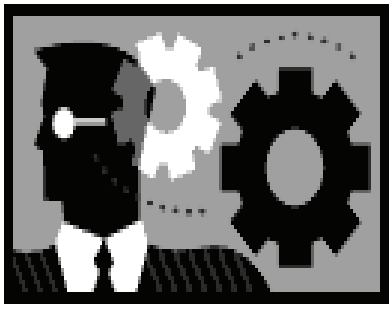
- Loss of support system
- Loss of job/income
- Increased psychological stress
- Change of roles within the family unit
- Decreased ability to function as a parent
- Decreased ability to function as a spouse/significant other

TBIs can contribute to limited problem-solving strategies

- Cognitive deficits
- Poor judgment
- Impulsivity
- Poor decision-making ability
- Organically-based mood lability

Assessment and Treatment Considerations [1]

Suicide Assessment



Questions to help you determine the level of suicidal risk:

What is the level of intent?

What is the rationale for the behavior?

What is the current level of combined stressors?

If the individual has a plan, how lethal is the method they are describing?

Is the plan feasible?

Have there been past attempts?

If so—is this situation similar?

Once you have assessed that there is a risk for suicidal behavior, you need to work with the TBI survivor and members of their support system to determine the safest way to manage their level of risk.

TBI ASSESSMENT

Questions to help you assess for TBI:

- Have you ever had a head injury?
    - When?
    - How many times?
- Do you remember what happened?
    - If not, what is the first thing you remember before/after the accident?
- Were you told that you had a loss of consciousness?
    - If so, for how long?
    - Can someone else provide this information also?
- Did you seek treatment?
    - If so, where?
- How long were you in the hospital?
- Were drugs/alcohol involved?
- Did you notice a change in your thinking or personality after the incident?
- Did you have trouble walking, completing tasks, driving, following a conversation?
- Did you have seizures/headaches?
- Did you receive Occupational Therapy, Physical Therapy, Speech, or Psychological services?

Treatment considerations for TBI and Suicide based on the literature [18,19]

- Screening, even many years after the injury, for post-TBI related psychiatric sequelae is indicated.

- Post-TBI some individuals may experience chronic suicidal ideation. As a result, survivors and family members/caregivers need to be educated about risk for suicide and encouraged to discuss and identify person- specific warning signs.

- In light of the fact that Simpson and Tate[16] found that a number of TBI survivors attempted suicide by overdose, they advocated limiting the availability of means. Once suicidal behavior has been identified as a significant issue, prescribers should "follow procedures designed to minimize harm."

- After a suicide attempt, close monitoring for at least one year for "signs of suicidality" is indicated.[19]

- Teasdale and Engberg[18] examined a 15-year period of time post-injury and found that the risk of suicide was maintained at roughly the same level during that period. This suggests the need for ongoing evaluation.

Limit the availability of means for self-harm

VISN 19 MIRECC Qualitative Study

"There were a lot of times from the beginning where I was on a bad course or whatever. My therapist never just told me that I needed to get to this other track. She showed me the ropes and how to get through the maze to get to this point. You know, she never talked at me or told me, 'you've got to do this to get there.' She said, 'Let's do this together...'"

TBI Survivor

"Traumatic Brain Injury and Suicide Prevention"

Traumatic Brain Injury and Suicide Prevention

With grant support from the Colorado TBI Trust Fund, 13 TBI survivors along with 4 family members were interviewed. Interview questions were modeled after those used by researchers in Australia who completed a similar project. [20]

Treatment Considerations Based on the Study Findings:

Be aware of what can precipitate suicidal thoughts in people with TBI:

- Loneliness
- Lack of connection
- Holiday times
- Lack of support
- Social anxiety
- Job / employment issues
- Lack of resources
- Frustration over tasks
- Bad news about prognosis

Things that helped:

- Psychotherapy
- Medication
- Support groups
- Having accessible providers
- Having a belief system—spirituality
- Distractions such as having something to do first, TV, computer etc.
- Having a responsibility such as a pet or a job
- Family / friends that care

A common theme among the participants was the idea that there had been a "loss of self" and a "lack of purpose" since the injury that contributed to their thoughts of depression and suicide.

Treatment geared toward helping patients to regain this sense of who they are is important. Suggestions included:

- Volunteer work
- Group work
- Helping others
- Pets

What Patients Thought Providers Should Know

- Take more time.
- Promote our independence.
- Repeat everything many times.
- It is very hard to access resources.
- Family and couples counseling is helpful.
- Group interactions with other people help.
- Provide consistent monitoring and follow-up.
- Communicate that there is a possibility of suicide.
- Care needs to be coordinated between all of our providers.
- Medication helps, but pay attention to what it is doing to us.
- There is a need for advocates; written communication is not enough.
- Involve family and friends. Patients forget to give you all the information.
- Caregivers need help, too. They have no idea what to expect, and there is a great deal of burden and burnout. They may need respite services.

Resources for Clinicians and Clients

The following pages list phone numbers and websites that can be used as resources for both clinicians and care providers. Please note that website content changes frequently.

For your convenience, pages 28-29 can be photocopied and given to TBI survivors, family members, and/or caregivers.

- Page 30 lists the contact information for a toll-free national Suicide Hotline number.

Suicide Resources

National Websites:

American Association of Suicidology: http://www.suicidology.org/

American Foundation for Suicide Prevention: http://www.afsp.org/

National Suicide Prevention Lifeline: http://www.suicidepreventionlifeline.org/

Suicide Prevention Resource Center: http://www.sprc.org

National Toll Free Numbers:

National Suicide Prevention Lifeline:

1-800-273-TALK

This toll free number is also now set up to take calls specifically from veterans. If a veteran calls the hotline and selects the VA option by pushing the #1, they are put in direct contact with a trained VA professional who will assess their crisis situation. These veterans are then contacted by local suicide prevention coordinators for follow-up care.

TBI Resources

Because details regarding support groups for TBI or Suicide often change, TBI survivors, family members, and care providers are encouraged to obtain information and inquire about local support groups from these larger organizations.

National Websites:

Brain Injury Association of America: *http://www.biausa.org/*

Defense and Veterans Brain Injury Center: http://www.dvbic.org/

National Toll-Free Numbers:

National Brain Injury Information Center: 1-800-444-6443

Defense and Veterans Brain Injury Center: 1-800-870-9244

If you are in an emotional crisis

Please talk to someone

1-800-273-TALK

(Press 1 if you are a veteran)

National Suicide Prevention Lifeline **Department of Veterans Affairs**

Responding to Suicide Risk

Assure the patient's immediate safety and determine most appropriate treatment setting!

Refer for mental health or assure that follow-up is made

Limit access to means of suicide

Inform and involve someone close to the patient

Increase contact and make a commitment to help patient through crisis

Suicide risk assessment:

Look for warning signs

Threatening to hurt/kill self

Looking for ways to kill self

Seeking access to pills, weapons, or other means

Talking or writing about death, dying or suicide

Presence of any of the above requires immediate attention and referral. Consider hospitalization for safety until compete assessment may be made.

Assess for risk and protective factors

Ask the questions

Are you feeling hopeless about the present / future?

If yes ask…

Have you had thoughts about taking your life?

If yes ask…

When did you have these thoughts, and do you have a plan to take your life?

And…

Have you ever had a suicide attempt?

For any of the above, refer for mental health treatment or assure that a follow up appointment is made.

Adapted from the *VA Suicide Pocket Card* Employee Education System at the Department of Veteran's Affairs

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