Deficits in Cognitive Functioning among Homeless Persons

Etiology, Prevalence, Severity, and Interventions

Jennifer Highley
Columbia University School of Nursing
New York City, New York
Introduction

Portions of this presentation have been previously presented at the following conferences:

National Healthcare for the Homeless Conference, 2007

The 2nd Annual Camillus House Institute of Homeless Studies Symposium, 2008

The Second Annual Conference: Brain Injury in the Community: Giving Voice to the Silent Epidemic, 2008
Acknowledgements

This work would not have been possible without the support of Virginia Luchetti, PhD and Wayne Gordon, PhD, ABPP/Cn
Why is it that so many homeless persons display deficits in cognitive functioning?
They sustain head injuries in the context of:

- Childhood physical abuse
- Childhood accidents
  - Motor vehicle accidents
  - Bicycle accidents
  - Falls
  - Accidents in the context of sports activities
They sustain insults to the brain in the context of:

- Chronic substance abuse
- Chronic untreated systemic illness
- Anoxia/Hypoxia
- Exposure to toxins
A typical story...

A man living in a park for the past 11 years reports being hit in the head on several occasions in the context of childhood abuse, twice with loss of consciousness. He states that at age 10, his mother broke a full bottle of liquor over his head...
... and its sequelae...

... he states that he was unable to pay attention in school, and was held back several grades. He was placed in foster care and became homeless when he aged out of foster care. He developed Post-Traumatic Stress Disorder as well as Major Depressive Disorder, became alcohol dependent and abused crack cocaine....
“Without more attention to these issues, homelessness will continue to persist as a pervasive social problem that creates a massive amount of preventable suffering.”

Clinical Dilemma

Homeless persons with significant cognitive deficits can often appear to be very high functioning because of their superior communication and survival skills.
Cognitive Functioning

- Language skills
- Memory (immediate and delayed)
- Visuospatial/constructional skills
- Attention
Clinical Dilemma

It is virtually impossible to detect deficits in cognitive functioning without conducting a formal assessment.

Medical and/or psychiatric examination of persons experiencing homelessness generally does not include effective neuropsychological assessment.

“82% (n = 219/266, CI 77–87%) had cognitive impairment....”
The Literature:


“...this sample of the homeless mentally ill proves to be severely and globally impaired. Impairment is reflected in ... test scores in reading, spelling and arithmetical computation ... planning ... and tests of verbal memory ... all of which ranged from the 8th to the 13th percentile ....”
The Literature:


“These results suggest that a substantial subset of nonpsychotic homeless veterans suffers from "occult" neurological deficits.”
The Literature:


“A high incidence of neuropsychological dysfunction was evident with 80% of patients showing impaired test battery performance and 35% showing an impaired MMSE.”
The Literature:


“The large majority of the study sample (80%) demonstrated performances on the Cognistat that suggested impaired cognitive functioning (i.e., their scores on at least one of the 10 subtests fell within the impaired range of performance).”

“...most studies indicate a considerable burden of cognitive dysfunction among homeless people.”

“In clinical practice, assessment of homeless adults should include their cognitive state.”
What did we find in clinical practice?

97 single persons (95 male/2 female)
100% chronically homeless (> 1 year)
80/97 reported a history of head injury
90/97 underwent neuropsych testing
What did we find?

70% scored in the 10th percentile or below in at least one domain of cognitive functioning
What did we find?

Over 80% report histories of major head injury
Over 50% suffer from PTSD
Over 25% suffer from Major Depression
Less than 5% suffer from any psychotic illness
Less than 10% suffer from bipolar illness
What did we find?

Over 70% abuse alcohol
Over 35% abuse cocaine
Over 20% are opioid dependent
Over 40% abuse cannabis
Over 15% use no substances at all
What do TBI professionals say?
...that people with head injuries can have trouble with:

- remembering information
- keeping appointments
- following instruction
- reading
- writing
- finding their way to appointments
- relating to others
- taking medication as prescribed
- regulating their emotions
...that people with head injuries can have trouble with:

- having to wait
- paying attention
- organizing themselves for upcoming interviews
- shopping for food
- cooking
- maintaining good boundaries
- staying away from drugs and alcohol
Question:

Is there any wonder that obtaining and maintaining housing is so difficult?
What do our patients tell us?

✓ “My memory is shot.”

✓ “I can’t remember anything.”

✓ “My friends give me a hard time, because I can’t remember stuff.”
What do our patients tell us?

“I lost my Medicaid because I forgot the appointment.”

“I couldn’t get SSI because I missed the appointments.”

“The shelter kicked me out because I forgot to call.”
What do our patients tell us?

“I quit taking my meds because I couldn’t remember how much I was supposed to take.”

“I lost my appointment slip, so I couldn’t get into the clinic.”

“I forgot the papers they told me to bring, so I couldn’t get a new Social Security card.”
Nasty Labels

“non-compliant”

“difficult to engage”

“poor historian”
What happens as a result?

People live in the street.
People live in the hospital.
People live in jails.
People live in detoxes and rehabs.

Most often, people cycle through all four settings, at enormous cost to themselves and society.
What does homelessness cost?

In dollars, it costs $10.95 billion per year in public funds, 90% in medical costs\(^1\)


In human suffering, the costs are immeasurable
The Problem

- The housing process often assumes good reading and writing skills, the ability to read a map, budget money, use a computer, wait for long periods, remember to bring important papers, read a calendar, follow instructions, keep appointments, get along with others, and have a lot of patience.
So what can we do about it?

Meet with clients one on one – not in a room with others.

Eliminate distractions such as background music, answering email and taking ‘phone calls while meeting with clients.

Limit communication to one mode at a time: do not show client something new while talking.

Accompany clients to their appointments.
How can we improve outcomes?

- Do not assume that the client can read/write/read a map/do math
- Do not assume that the client can negotiate public transportation
- When prescribing, use monotherapy whenever possible, and use a qd drug over bid, tid and qid medications whenever possible
- Label medications for patients who cannot read in a way they can understand
How can we “do the right thing”? 

Perform appropriate neuropsychological testing on all homeless persons.

Use neuropsychological test results to justify SSI/SSD/VA disability claims

Use these test results to bypass long waits at public assistance or other bureaucracies.
What else can we do?

- Adopt policies of trauma-informed care
- Mandate staff training on traumatic brain injury and its sequelae
- Develop relationships with local Traumatic Brain Injury Model System leadership
- Join your local Brain Injury Association and attend their conferences
What other steps can we take?

- Create partnerships with other agencies and facilities for referrals for appropriate care, such as cognitive remediation, TBI day treatment programs, trauma-informed substance abuse treatment programs, and trauma-informed psychiatric care
- Inform housing providers of the special needs of those with cognitive impairment
- Place clients in congregate care settings, not alone in scatter-site apartments
What else will help?

✓ Provide visiting aftercare services, such that disabilities do not pose obstacles to care

✓ Hire a neuropsychologist
What should I do now?

Tell others about what you learned today regarding deficits in cognitive functioning among homeless persons

Apply what you learned today in your practice or at your agency

Attend Dr Theo Tsaousides’ workshop on assessment this afternoon
Thank You

Jennifer Highley
jlh73@columbia.edu