



CATIE/PAN Pacific Educational Conference

September 14-15, 2011

Presentation: HIV and Mental Health:
Understanding the Complex Relationship

On Thursday September 15, 2011

Vancouver Airport Marriott Hotel



Canada's source for
HIV and hepatitis C
information

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le VIH et l'hépatite C

HIV and Mental Health: Understanding the Complex Relationship A Skills Building Workshop

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Conversation 1: What mental health challenges among PHAs are you seeing in your community? In your organization?

Workshop Learning Objectives

After today's workshop, you will:

- Understand the relationship between HIV infection and mental health
- Understand the importance of recognizing and addressing mental health issues common in people with HIV (PHAs)
- Describe some practical strategies to support the mental health of PHAs

What is Mental Health?

“Mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.” -World Health Organization (WHO)

What is Mental Health? (cont'd)

“A lifelong journey to achieve wellness and balance of body, mind and spirit..(and) includes self-esteem, personal dignity, cultural identity, and connectedness in the presence of harmonious physical, emotional, mental and spiritual wellness.”

–Assembly of First Nations

Conversation 2:

What are some events that are common in the lives of many PHAs that could challenge their mental health?

Conversation 3:

Which groups of people in your community are most vulnerable to HIV infection?

What is Depression?

- **“Major depressive disorder”** is characterized by an all-encompassing low mood, accompanied by low self-esteem, inappropriate guilt and loss of interest or pleasure in normally enjoyed activities
- More than just sadness or “the blues”
- Lasts longer than 2 weeks, with changes in sleep, weight, appetite etc.

Facts about Depression and HIV

- One of the most common conditions in PHAs
- PHAs are more likely to develop depression than someone without HIV
- Survey of 136 HIV doctors (IAPAC) found that 80% of their patients suffered from anxiety and/or depression
- Advancing HIV disease increases risk of depression
- More common in women than men

Anxiety and HIV

- Group of conditions sharing one major symptom: persistent or severe fear or worry in situations where these feelings are unwarranted or excessive
- Anxiety that is constant and/or overwhelming, interferes with relationships and activities
- Often occurs with depression and substance use
- Highly treatable with therapy, medications and complementary therapies

Substance Use, Addiction and HIV

- About 20% of people with a mental health issue also use substances (CAMH)
- Substance use may lead to problems with medication adherence
- Substances are often used to self-medicate

HIV and Suicide

- Rates have declined since the introduction of ARVs
- Among PHAs, we see higher rates in:
 - Older PHAs
 - Men
 - Advanced HIV disease
 - PHAs with pre-existing mental illness
 - Injection drug users
 - *Can you think of reasons for this?*
- We also see higher rates in Aboriginal communities

Conversation 4:
Mental health issues are often overlooked and undiagnosed in PHAs.
Why?

Depression-like Symptoms can be caused by other things

Hormones and Hormone-based therapies: menopause, oral contraceptives, hormone replacement therapy

Certain conditions: low testosterone, low thyroid, anemia, neuro-cognitive impairment, vitamin B12 deficiency, advanced liver disease --try to get tested for these, if possible!

Certain drugs commonly used in HIV: efavirenz (Sustiva), steroids, ethionamide/ isoniazid (TB), interferon (HCV), acyclovir (herpes), co-trimoxazole (PCP prophylaxis)

Remember... it may still be depression

Why is it Important to Recognize and Treat Depression?

Treating depression may:

- Slow HIV progression
- Improve adherence
- Improve ability to maintain safe sex and drug use practices
- Improve overall quality of life

Source: Adding Life to Years Project: Phase IIA National Collaborative and Multi-sectoral; Response to HIV and Depression Rourke, S, Kennedy, S McGee, F

Treatment of Depression

- Anti-depressant medication such as Prozac, Zoloft, Paxil, Celexa and Luvox (SSRIs)
- Talk therapy (social worker, psychologist, students)
- Check drug interactions by speaking to your pharmacist and your doctor

Common drug interactions

- Methylphenidate – used to treat ADD
- Paroxetine – Paxil, an SSRI
- Fluoxetine – Prozac, an SSRI
- Fluvoxamine – Luvox, an SSRI
- St. John's Wort – herbal remedy for depression

Building Resilience and Coping Skills

- Commitment
 - Meaning and engagement in life
- Control
 - Self-efficiency
- Challenge
 - Overcoming obstacles are a pathway to growth
- Connection
 - To self, loved ones, community

HIV's Physiological Impact on the Brain

Inflammation: the immune system's response to infection in the body

Chronic inflammation: Low grade, ongoing inflammation

The Impact of Chronic Inflammation

- Stiffening and thickening of blood vessels (increased heart disease and stroke risk)
- Accelerating tissue/organ damage in the body, bones and brain
- Can cause premature aging
- Inflammation begins right after HIV infection
- Inflammation is controlled by ARVs
 - some people are beginning to consider starting treatment earlier

HIV-Associated Neurocognitive Disorder

- **H** HIV
- **A** Associated
- **N** Neurocognitive
- **D** Disorder

Signs of HAND

- Difficulty concentrating
- Difficulty learning new information
- Difficulty recalling information
- Behavioural changes: agitation, apathy, personality changes, social withdrawal
- Motor skills: unsteady walk, tremors, problems with coordination, abnormal eye movement

How common is HAND?

- Estimate 30-50% of PHAs may be affected by some form of HAND
- BUT... **ARVs help to control dementia**
- Number of new cases of dementia have dramatically **decreased** with ARVs
- Prevalence of HAND (total number of people who have the condition) has increased as PHAs live longer

How common is HAND? (cont'd)

- Milder forms of HAND have not disappeared with ARVs; may have increased in frequency
- Neurocognitive problems seem to continue in some PHAs despite the success of ART

Diagnosing HAND

- Often difficult to diagnose:
 - aging?
 - depression?
 - other diseases?
- Bottom line: Complete work up including cognitive testing, blood/ cerebrospinal fluid tests and possibly brain scans for diagnosis

Factors associated with risk of developing HAND

- Low CD4 cell count
- High Viral Load
- Age greater than 45
- Diabetes or insulin resistance
- Use of stimulants (cocaine, methamphetamine)

Penetration of HIV Drugs through the Blood-Brain Barrier

ARV Drug Class	4	3	2	1
Nucleoside Reverse Transcriptase Inhibitors (NRTIs)	Zidovudine (AZT)	Abacavir Entricidabine	Didanosine (ddI) Lamivudine (3TC) Stavudine (d4T)	Tenofovir Zalcitabine (ddC)
Non-nucleoside Reverse Transcriptase Inhibitors (NNRTIs)	Nevirapine	Delavirdine Efavirenz (Sustiva)	Etravirine	
Protease Inhibitors	Indinavir/r	Darunavir/r Fosamprenavir/r Indinavir Lopinavir/r (Kaletra)	Atazanavir Atazanavir/r Fosamprenavir	Nelfinavir Ritonavir Saquinavir Saquinavir/r Tipranavir/r
Entry/ Fusion Inhibitors		Maraviroc		Enfuvirtide
Integrase Inhibitors		Raltegravir		

Conversation 5: What are some things you can do to support your brain's health and take care of your mental health?

Case Studies

What's going on in terms of possible mental health issues in your case study?

What could your organization and its partners do to help?

Mind Mapping

- Graphic way to represent ideas/concepts
- Visual thinking tool
- Helps structure information and generate ideas
- Analytical and artistic

Task: Make a Mind Map of Your Response



How To Mind Map

- Start in the centre with the issue at hand
- Think of a tree with limbs and branches
- Branches have different colours and thicknesses
- Use images, symbols freely
- Select key words to label ideas
- Connect lines, starting from the central topic
- **You can't go wrong**

Learning Objectives

- Understand the complex relationship between HIV infection and mental health
- Understand the importance of recognizing and addressing depression and other mental health issues common in people with HIV
- Understand some practical strategies to support the mental health of people with HIV

CATIE Resources

Selected Resources

- Canadian Mental Health Association
- CMAH Centre for Addiction and Mental Health (Mood and Anxiety Program)
- Mood Disorders Association of Ontario
- Family Association for Mental Health Everywhere (FAME)
- Community Care Access Centres
- Distress Centre
- Gerstein Crisis Centre (Toronto)

Thank you!