HIV AIDS AND MENTAL HEALTH

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OVERVIEW

- Introduction
- Epidemiology
- Aetiopathogenesis
- Psychiatric Disorders and HIV AIDS
- Psychological Problems and HIV AIDS
- Pretest and Post test counselling in HIV AIDS
- Psychopharmacology and Psychotherapy in HIV AIDS
- Global Mental Health in HIV AIDS
- Indian Scenario
- Future clinical, service and research perspectives

SPECIFIC LEARNING OBJECTIVES

- To be able to understand contextual issues in HIV AIDS and Mental health
- To be able to discuss relevant epidemiological and aetiopathological aspects of HIV AIDS
- To understand clinical presentations, and management of neuropsychiatric disorders and HIV AIDS
- To understand context of neuropsychiatric disorders related to drug induced aspects for HIV AIDS
- To understand psychological issues and their management in HIV AIDS
- To comprehend and discuss relevant issues in global mental health

INTRODUCTION

- The HIV/AIDS epidemic remains among the most significant challenges to public healthcare systems worldwide.
- Globally, 36.7 million [34.0–39.8 million] people were living with HIV at the end of 2015.

Global Health Observatory (GHO) data HIV/AIDS (2016)

INTRODUCTION

- HIV epidemic started in the 80's.
- Neurologists generally dealt with HIV related CNS syndrome
- Until 90's, psychiatrists were focusing on issues related to grief, loss, support and related therapy for AIDS patients.
- Later, HIV related mood, psychotic disorders, chronic pain syndrome ,HAD etc. were identified.
- Antiretroviral drug induced psychiatric symptoms were also covered.

BACKGROUND

- Some of the drugs used in HAART (efavirenz and nevirapine) are known to be associated with psychiatric side effects.
- Although HIV AIDS being a big public health problem worldwide, limited data is available regarding association of HIV and psychiatric co-morbidity from developing countries such as India.

Chandra PS,Desai G &Ranjan S,HIV& psychiatric disorder,Indian J Med Res 121, April 2005, pp 451-467

BACKGROUND

- HIV/AIDS is a devastating illness that humans have ever faced, associated psychiatric co-morbidities in HIV/AIDS patients are very common but the factors affecting it are not well studied.
- Literature describes it to be a highly stigmatized, chronic disease with a substantial co-occurrence of

Whetten K, Reif S, Whetten R, Murphy-McMillan LK. Trauma, mental health, distrust, and stigma among HIV-positive persons: implications for effective care.Psychosom Med. 2008 Jun;70(5):531-8

RELEVANCE

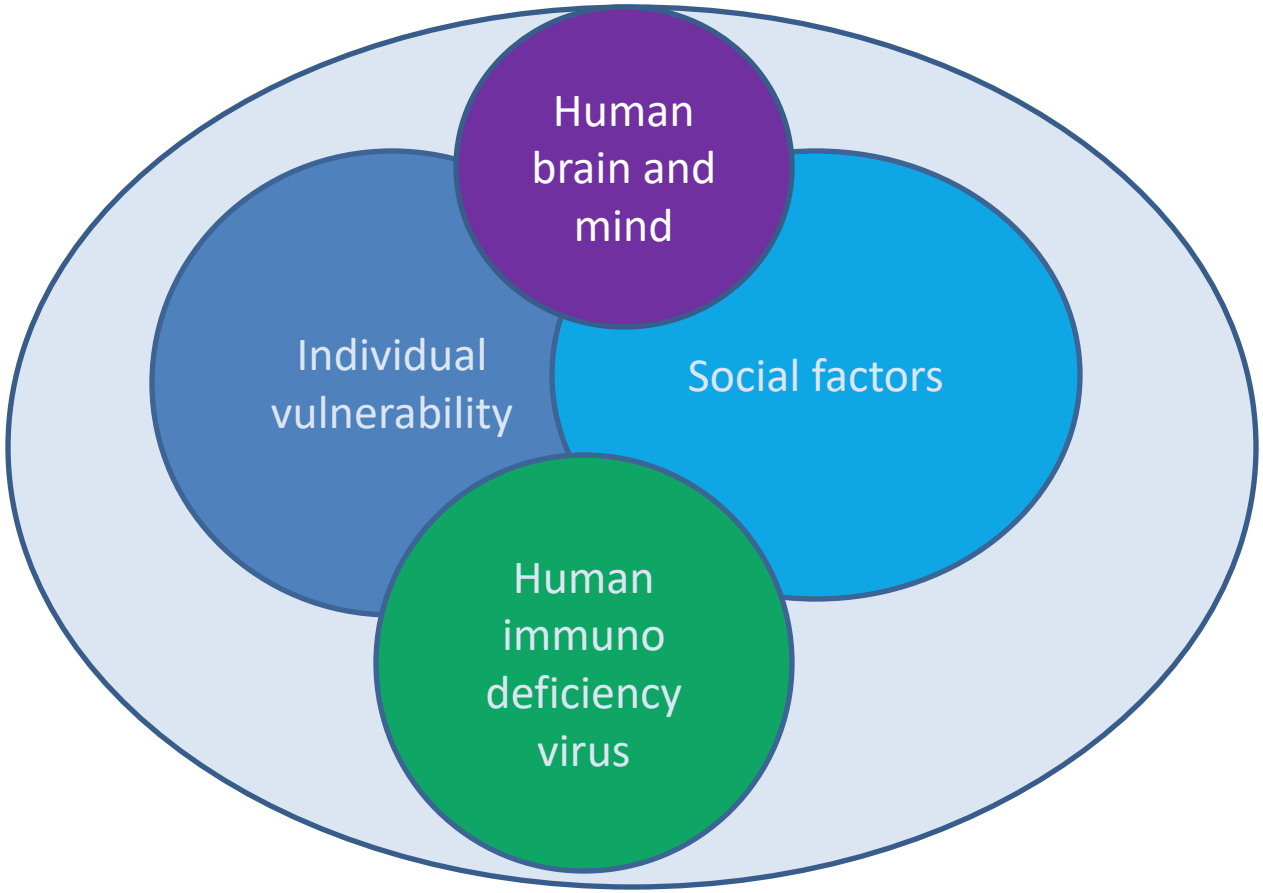
- Literature highlights that patients with mental health problems are at increased risk of contracting HIV and HIV-infected patients are at increased risk of developing mental health problems compared with the general population.[5]
- Mental health problems in HIV-infected patients have a negative influence on the overall treatment, adherence to treatment, and prognosis of the HIV-infection

SPECTRUM

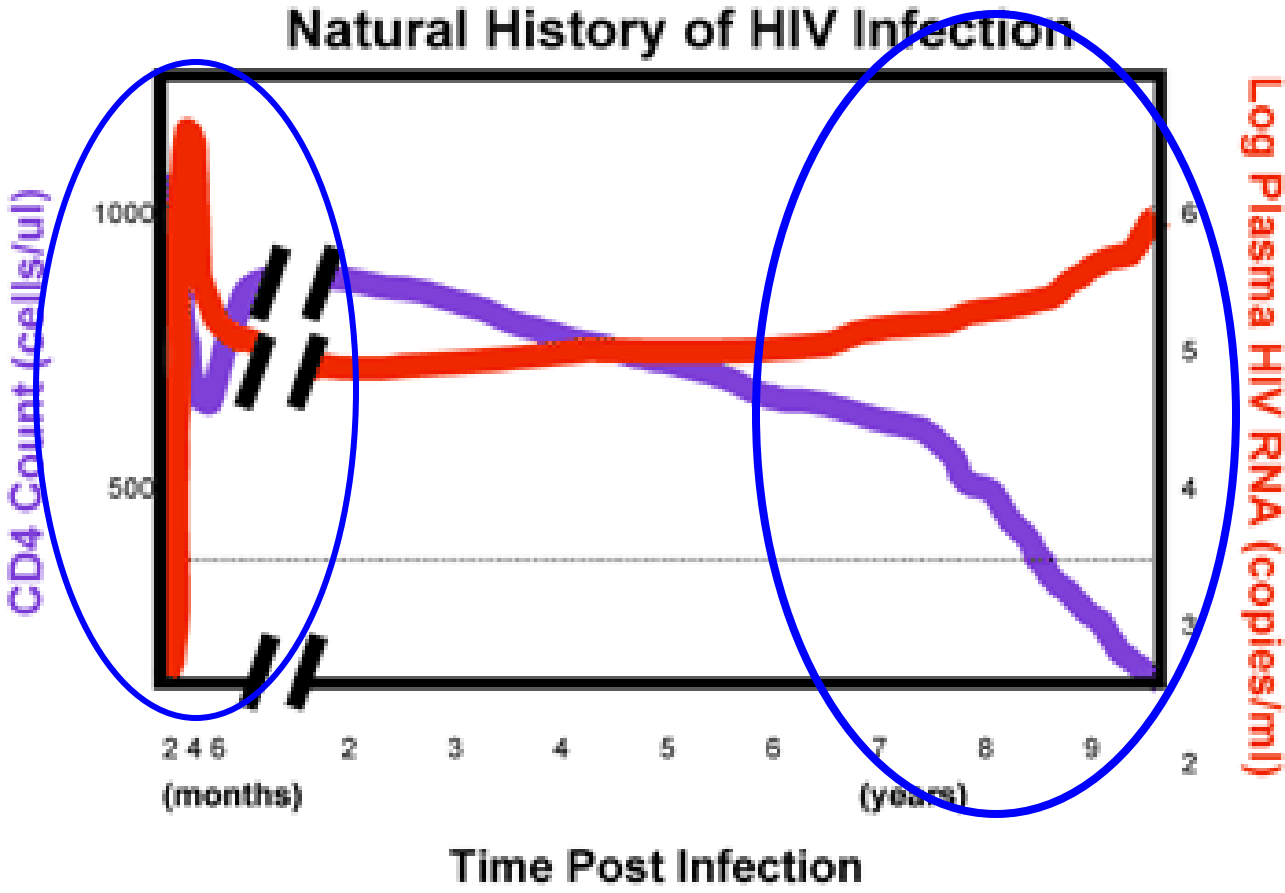
- The onset of mental health problems may manifest across a spectrum from the time HIV is diagnosed to starting the treatment and the terminal care phase.
- HIV can have direct effects on the brain that may lead to neurocognitive disturbances,mood disorder, psychosis or behavioural changes.

*Subedi S, Chalise P, Aich TK, Thapa DK . Psychiatric Co-morbidity in HIV/AIDS: A Neglected Issue. J Psychiat*rists' Association of Nepal Vol .2, No.2, 2013

INTERACTIVE AETIOPATHOGENESIS MODEL



Psychiatric morbidity parallels the time course of HIV infection



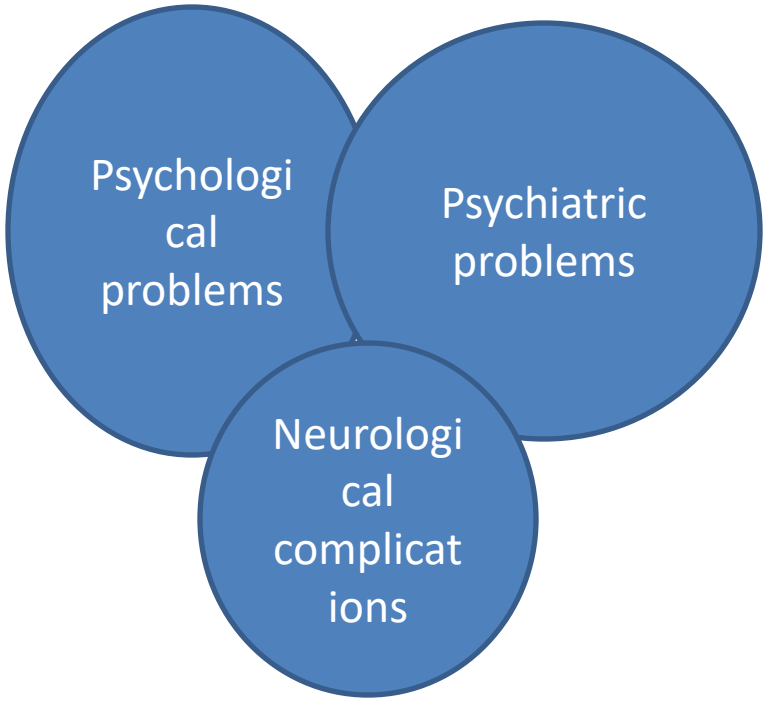
PSYCHIATRIC MORBIDITY PARALLELS THE TIME COURSE OF HIV INFECTION

- Mental health problems are most likely to occur at two stages of the infection:
- when the person is given the diagnosis of HIV infection
  - Usually self limiting
- when physical symptoms develop or worsen
  - anticipatory grief
- Compounded by individual vulnerabilities, financial problems, social supports

PSYCHIATRIC MORBIDITY PARALLELS THE TIME COURSE OF HIV INFECTION

- Psychiatric morbidity in HIV :
  - as a result of the interaction between
    - Individual vulnerabilities
    - the stressful situation
    - and the social and emotional supports available.
    - Drug induced
- Neuropsychiatric syndromes such as delirium and dementia
  - direct or indirect effects upon the brain, of the virus
  - from complications resulting from immunosupression, such as opportunistic infection or tumours.
  - Drug induced

MENTAL HEALTH PROBLEMS ASSOCIATED WITH HIV



MENTAL HEALTH PROBLEMS IN SYMPTOMATIC PEOPLE WITH HIV INFECTION

- Adjustment disorders
- Anxiety and panic
- Depression
- Grief reactions
- Psychosis
- Substance dependence
- Mania
- Minor cognitive motor deficits
- Delirium
- Dementia

"Worried well"

PSYCHOLOGICAL STATES ASSOCIATED WITH KNOWLEDGE OF HIV INFECTION

- Shock
- Denial
- Fear
- Guilt
- Anger & Resentment
- Grief & Depression
- Anxiety

- Loss of self esteem
- Loss of control
- Isolation
- Suicidal ideation

- Relief
- Positive adjustment

PSYCHIATRIC CONDITIONS ASSOCIATED WITH HIV

- The psychiatric sequelae of HIV-1 infection and AIDS are due to
- Grief response of being diagnosed with a terminal illness
- Exacerbation of pre existing psychiatric illness
- Development of new primary syndromes

PSYCHOSIS AND HIV AIDS

- Navia and Price found that 15% of 46 patients in their study with HAD experienced psychotic symptoms.
- Psychotic symptoms seen in HIV-infected individuals may be primary or secondary.
- Occasionally psychotic symptoms may be the presenting complaints of an HIV illness.

Elliot A. (Winter 2002/2003). Depression and HIV in the era of HAART.Retreived from http://www.thebody.com/content/art1819.html

Navia BA, Price RW. The acquired immunodeficiency syndrome dementia complex as the presenting or sole manifestation of human immunodeficiency virus infection. Arch Neurol. 1987 Jan;44(1):65-9. PubMed PMID: 3800724.

Alciati A, Fusi A, D'Arminio Monforte A, Coen M, Ferri A, Mellado C. New-onset delusions and hallucinations in patients infected with HIV. J Psychiatry

PSYCHOSIS AND HIV AIDS

- Primary psychosis does not yield any signs of HIV cerebral disease
- secondary psychosis often occurs in the context of global (encephalopathy) or localized pathology (most often lesions of the left temporal lobe and diencephalon).
- differential diagnosis include presence of opportunistic infections like tuberculoma, toxoplasmosis and cryptococcal meningitis, which may present as acute psychosis in the initial stages.
- Drugs like INH can also contribute to psychosis and co-occurrence of neurosyphilis may also lead to psychosis.

Neurosci. 2001 May;26(3):229-34. PubMed PMID: 11394192; PubMed Central

MENTAL HEALTH & HIV/AIDS
SCHIZOPHRENIA

- Patients with chronic mental illness at increased risk for HIV infection
  - Prevalence rates 2 to 10%
  - Medical providers often do not test for HIV
    - Incorrectly assume pts not sexually active
    - Substance abuse significant co-morbidity
    - Pts do not implement HIV risk behavior knowledge

MENTAL HEALTH & HIV/AIDS
SCHIZOPHRENIA

- Treatment
  - Coordinate between medical & psychiatric providers as much as possible
  - Typical or 1st generation antipsychotics
    - Increase risk of EPS & tardive dyskinesia
  - Atypical or 2nd generation antipsychotics are preferred but risk weight gain:
    - Olanzapine (Zyprexa) > risperidone (Risperdal) & quetiapine (Seroquel) > ziprasidone (Geodon) & aripiprazole (Abilify)

*Note: clozapine (Clozaril) contraindicated for several reasons

DEPRESSION AND HIV AIDS

- Existing studies have shown that emotional problems are among the most common symptoms in HIV patients with up to 98.6% prevalence.
- Depression is a prevalent comorbidity in HIV infection as well as a recognized side-effect of NRTI, Protease inhibitors and NNRTIs .
- HIV infected individuals can be at a high risk of depression and self harm in the period immediately after being diagnosed with a seropositive status, especially if they have a significant past psychiatric history.

- *Wig N, Sakhuja A, Agarwal SK, Khakha DC, Mehta S, Vajpayee M. Multidimensional health status of HIV-infected outpatients at a tertiary care center in north India. Indian J Med Sci. 2008 Mar;62(3):87-97.*
- *Chandra PS, Krishna VA, Ravi V, Desai A, Puttaram S. Hiv related admissions in a psychiatric hospital a five year profile. Indian J Psychiatry. 1999*

DEPRESSION AND HIV AIDS

- Bhatia et al who found that the prevalence of depression in patients in their study with HIV under ART was 58.75%.
- Mood disorders, depression in particular, are the most frequent psychiatric disorder associated with HIV disease.
- The lifetime prevalence of depressive disorders can range from 22% to 61% in HIV-positive populations in certain studies.
- These rates are significantly higher than estimates of lifetime and current diagnosis of major depression in community samples.

MENTAL HEALTH & HIV/AIDS
DEPRESSION

- Prevalence estimated at twofold higher
  - Meta-analysis 10 studies (Ciesla & Roberts 2001)
- Risk factor for HIV Infection (Regier 1990)
- 2.5 fold increase when CD4 cell <200 cells/mm^3 (Lyketsos 1996)

MENTAL HEALTH & HIV/AIDS
DEPRESSION

- Multiple studies indicate almost all antidepressants are effective
  - Concern for P450 interactions with some antiretroviral medications
    - Favor citalopram & sertraline over paroxetine & fluoxetine (2D6)
    - Caution with nefazodone & fluvoxamine (3A4)
  - Side effect profile guides choice of agent
    - Mirtazipine favored for sedation and appetite stimulation

MENTAL HEALTH & HIV/AIDS
DEPRESSION

- Psychotherapy
  - Many studies showing benefit with and without antidepressants
    - Group therapy – prominent modality
    - Cognitive Behavioral Therapy (CBT)
    - Interpersonal
    - Supportive
  - Themes of guilt, shame, anger

MENTAL HEALTH & HIV/AIDS
PTSD

- Greatly increased rates
  - 42% HIV+ women, County Medical Clinics (Cottler 2001)
  - 30% pts develop in reaction to HIV diagnosis (Kelley 1998)
  - Predicts lower CD4 counts (Lutgendorf 1997)
  - Higher levels of pain (Smith 2002)

MENTAL HEALTH & HIV/AIDS
PTSD

- SSRIs show 50% improvement in sx
  - prefer to use sertraline (Zoloft) or citalopram (Celexa)

- Prazosin often used for intrusive nightmares
  - current studies (Raskind SVAMC)

- Psychotherapy effective, using variety of approaches (CBT, Abreaction, Supportive)

MENTAL HEALTH & HIV/AIDS
PANIC DISORDER

- Panic Disorder & Generalized Anxiety Disorder > 4 times more prevalent (Bing 2001)

- Affects accessing primary care, adherence to treatment, and quality of life
  - Especially agoraphobic/housebound

- Responds well to treatment

MENTAL HEALTH & HIV/AIDS
PANIC DISORDER

- First line treatment: SSRIs
  - Then consider dual action agents (venlafaxine (Effexor) or duloxetine (Cymbalta)), mirtazepine (Remeron), or tricyclics (TCAs)
  - Wellbutrin of little benefit
- Responds well to psychotherapy: CBT
- Best outcomes = both meds & psychotherapy
- Use benzodiazepines as last resort
  - eg, clonazepam preferred (longer half life)

BEREAVEMENT AND GRIEF

- The severity of HIV and AIDS
- the loss of health
- a decrease in functioning,

deterioration of body integrity

- the anticipatory loss of life

result in bereavement.

MENTAL HEALTH & HIV/AIDS
BIPOLAR - MANIA

- Prevalence of bipolar disorder in HIV infection is 10 times higher than in general population

(Lyketsos 1993)

- Stress of HIV infection exacerbates pre-existing bipolar disorder – complicating adherence

- New-onset or secondary mania
  - result of HIV infection, opportunistic infections or due to antiretroviral medications

MENTAL HEALTH & HIV/AIDS
BIPOLAR - MANIA

- Secondary mania
  - Associated with impaired cognition
  - Increased risk of dementia
  - Different clinical features
    - Irritable > elevated mood
    - Psychomotor slowing
    - More chronic than episodic
    - More resistant to treatment

MENTAL HEALTH & HIV/AIDS
BIPOLAR - MANIA

- Treatment
  - Not well studied with mostly anecdotal case reports
  - Depakote (VPA) well tolerated
    - Avoid with impaired hepatic function
    - Risk anemia with AZT
  - Lithium
    - Conflicting reports of good response (increases WBC) versus intolerable side effects
  - Tegretol (carbamazepine)
    - Avoid as risks medication interactions (inducer) & bone marrow suppression

MENTAL HEALTH & HIV/AIDS
BIPOLAR - MANIA

- Treatment
  - Second generation (atypical) antipsychotics all have indication as mood stabilizers, well tolerated and effective for psychotic sx's
    - Olanzapine (Zyprexa) > risperidone (Risperdal) & quetiapine (Seroquel) > ziprasidone (Geodon) & aripiprazole (Abilify)
  - Risk of metabolic effects: wt gain, DM, hyperlipidemia, etc

*Note: clozapine (Clozaril) contraindicated for several reasons

MANIA AND HIV AIDS

- Lyketsos et al found that in early HIV infection, 1%–2% of patients experience manic episodes.
- However, after the onset of AIDS, 4%–8% of patients appear to experience mania.
- Mania or manic symptoms can be direct effect of the illness, effect of HAART drugs, or as a reaction to disclosure of the diagnosis.

- *Heaton RK, Grant I, Butters N, White DA, Kirson D, Atkinson JH, McCutchan JA, Taylor MJ, Kelly MD, Ellis RJ, et al. The HNRC 500--neuropsychology of HIV infection at different disease stages. HIV Neurobehavioral Research Center. J Int Neuropsychol Soc. 1995 May;1(3):231-51. PubMed PMID: 9375218.*
- *Dubé, B., Benton, T., Cruess, D. G., & Evans, D. L. (2005). Neuropsychiatric manifestations of HIV infection and AIDS. Journal of Psychiatry and Neuroscience, 30(4), 237–246.*
- *Perkins DO, Davidson EJ, Leserman J, Liao D, Evans DL. Personality disorder in patients infected with HIV: a controlled study with implications for clinical care. Am J Psychiatry. 1993 Feb;150(2):309-15*

PERSONALITY DISORDERS AND HIV AIDS

- Perkins et al, found a significantly higher prevalence of personality disorder in the HIV-positive (33%) than in the HIV-negative (15%).
- Among HIV-positive subjects, those with a personality disorder compared to those without a personality disorder shows significantly greater mood disturbance, experience greater dysphoria and are more likely to cope with the threat of AIDS in a dysfunctional way.

- *Atkinson JH, Grant I. Natural history of neuropsychiatric manifestations of HIV disease. Psychiatr Clin North Am. 1994 Mar;17(1):17-33. Review*

SUBSTANCE USE DISORDERS AND HIV

- VECTOR for HIV
- 44%
- Accumulation of medical sequelae from chronic substance abuse accelerates the process of immunocompromise and amplifies the progressive burdens of the HIV infection itself.
- Injection drug users

NEUROPSYCHIATRIC SYNDROMES ASSOCIATED WITH HIV INFECTION

- HIV infection may be associated with:
  - Mild cognitive-motor disorder (MCMD)
  - Delirium
  - Dementia
  - Organic mood disorders
  - Organic psychoses

MENTAL HEALTH & HIV/AIDS
DEMENTIA

- Neurocognitive problems
  - 30-50% Subclinical
    Neuropsychological testing impaired

---------(threshold clinical significance)----------

  - 20% MCMD
    Minor Cognitive Motor Disorder
  - 2-4% HAD
    HIV Associated Dementia

MENTAL HEALTH & HIV/AIDS
DEMENTIA

- Mild Manifestation
  - MCMD

  Minor Cognitive Motor Disorder

- Diagnostic Criteria

  1) At least 2 of: impaired attention, concentration, memory, mental & psychomotor slowing, personality change

  2) Rule out other cause

- Severe Manifestation*
  - HAD

  HIV Associated Dementia

  ***functional impairment**

- Diagnostic Criteria

  1) Acquired cognitive abn*

  2) Acquired motor abn*

  3) No clouded LOC & rule out other cause

MINOR COGNITIVE MOTOR DISORDER

- 22% of asymptomatic, HIV infected individuals, 50% of early symptomatic individuals, and 60% -90% of late symptomatic individuals have at least MCMD
- Slowness, in-coordination, speed of information processing
- Causes subtle occupational impairment, predicts faster mortality

MCMD

Mild Neurocognitive Disorder:

- 40-60% have MCMD
- Also known as HIV encephalopathy-is a less severe syndrome

✓ Ch-by impaired cognitive functioning +reduced mental activity+ interference with work ,ADL, social functioning

✓ No lab abnormalities specify to MCMD(HIV encephalopathy)

NEUROCOGNITVE DISORDERS AND HIV AIDS

- Neurocognitive deficits are manifestations of both direct and indirect effects of HIV on the CNS.
- HIV/AIDS patients with advanced disease can present with deficits in many cognitive domains.
- As the disease progresses, additional cognitive domains often become impaired. Executive functions such as Attention, concentration and working memory are affected. Learning and memory can also be impaired in HIV/AIDS.

- *Dubé, B., Benton, T., Cruess, D. G., & Evans, D. L. (2005). Neuropsychiatric manifestations of HIV infection and AIDS. Journal of Psychiatry and Neuroscience, 30(4), 237–246.*
- *Sacktor N, Lyles RH, Skolasky R, Kleeberger C, Selnes OA, Miller EN, Becker JT, Cohen B, McArthur JC; Multicenter AIDS Cohort Study.. HIV-associated neurologic disease incidence changes:: Multicenter AIDS Cohort Study, 1990-1998*

HIV-1 Associated Dementia (HAD)

- More common when CD4 count <200
- The difference between MCMD and HAD lies in the severity of symptoms and interference in daily functioning.
- People with HAD show marked slowing and impairment in attention, concentration and information processing.
- There is also impairment in learning new information, problems in fluency and naming, and motor incoordination.

HIV-1 ASSOCIATED DEMENTIA (HAD): DIFFERENTIAL DIAGNOSIS

- Focal lesions such as cerebral toxoplasmosis, CNS lymphoma, and progressive multifocal leucoencephalopathy.
- CNS infections such as cryptococcus or tuberculous meningitis, cytomegalovirus infection, herpes simplex encephalitis and neurosyphilis
- Depressive pseudo-dementia

MENTAL HEALTH & HIV/AIDS
DEMENTIA

- HIV-infected macrophages directly enter CNS early in HIV infection
- CNS may be sanctuary for HIV replication
- CSF HIV viral load not correlated with plasma viral load when CD4 count <200 cells/mm^3
- CSF viral load correlates dementia severity

MENTAL HEALTH & HIV/AIDS
DEMENTIA

- With effective ART, incidence of CNS OIs dropped significantly, since early 1990's
  - 2/3 decreased incidence HAD

    (Saktor 1999)
  - 75% decrease CMV & lymphoma on autopsy
  - However 60% with some evidence of HIV encephalopathy on autopsy*

    (Neuenburg 2002)

MENTAL HEALTH & HIV/AIDS
DEMENTIA

- Risk Factors
  - Seroconversion illness
  - Anemia
  - Vitamin deficiencies (B6, B12)
  - Low CD4 count
  - High CSF HIV viral Load
  - ETOH, cocaine & amphetamine
  - Depression

MENTAL HEALTH & HIV/AIDS
DEMENTIA

- Treatment
  - Most effective treatment is ART
    - Raises question of lumbar puncture to confirm effectiveness on CSF HIV viral load…..
  - Slows progression of dementia (Ferrando 1998)
  - Reversed periventricular white matter changes seen on MRI scan in some cases

MENTAL HEALTH & HIV/AIDS
DEMENTIA

- Potential neuroprotective agents
  - Most promising are memantine (Namenda) & selegeline (L-Deprenyl)
  - Many adjuvant agents commonly used, with some controversy about use of stimulants
    - Improved cognitive performance (Brown 1995, Hinkin 2001)
    - Accelerated HAD sx's (Czub 2001, Nath 2001)

MENTAL HEALTH & HIV/AIDS
DEMENTIA

- Adjuvant treatments
  - Selegeline (L-Deprenyl)
  - Buproprion (Wellbutrin)
  - SSRIs (Prozac, Paxil, Celexa, Zoloft, Lexapro)
  - Dual-action antidepressants (Effexor, Cymbalta)
  - Atomexitine (Strattera)
  - Modafinil (Provigil)
  - Anabolic steroids
  - Atypical or second generation antipsychotics

CHANGES IN THE HIV/AIDS EPIDEMIC

- Medical Treatment Evolution
  - Monotherapy in early 1990s
  - Dual agent approach by mid 1990's
  - Combination antiretroviral therapy (ART), also called highly active antiretroviral therapy (HAART), since late 1990s: 3 or more agents

CHANGES IN THE HIV/AIDS EPIDEMIC

ART

Has produced dramatic & significant improvement in prognosis for HIV infection

But has also emphasized the importance of:

- Adherence
- Medication Interactions

CHANGES IN THE HIV/AIDS EPIDEMIC
ARV MEDICATIONS

- NRTIs
  - Abacavir (Ziagen)
  - Didanosine (Videx)
  - Emtricitabine (Emtriva)
  - Lamivudine (Epivir)
  - Stavudine (Zerit)
  - Tenofovir (Viread)
  - Zalcitabine (Hivid)
  - Zidovudine (AZT)
- NNRTIs
  - Efavirenz (Sustiva)
  - Nevirapine (Viramune)
  - Delavirdine (Rescriptor)
- Protease inhibitors
  - Amprenavir (Agenerase)
  - Atazanavir (Reyataz)
  - Darunavir (Prezista)
  - Fosamprenavir (Lexiva)
  - Indinavir (Crixivan)
  - Lopinavir/ritonavir (Kaletra)
  - Nelfinavir (Viracept)
  - Ritonavir (Norvir)
  - Saquinavir (Fortovase)
  - Tipranavir (Aptivus)
- Fusion Inhibitor
  - T20 (Fuzeon)

HAART AND PSYCHIATRY

- Triple therapy: two reverse transcriptase inhibitors and one PI.
- Two NRTI and a third agent can be NNRTI or a PI or another agent.
- Adherence adherence adherence
- Psychiatric disorders compromise the ability to take treatment, adhere to medications, practice safe sex, and stop using IV drugs.
- Overlooked critical factor in continuing of HIV epidemic.

HIV DRUGS AND PSYCHIATRY

- Abacavir-psychosis and catatonia
  foster et al 2003
- Efavirenz- major depression with psychosis.
  Puzantian 2002
- Psychotropic medications may be reqd to treat psychiatric symptoms resulting either from CNS infection or from HAART.
  sanz et al 2001.

HIV DRUGS AND PSYCHIATRY

- Zidovudine, a “nucleoside Analogue” that inhibits replication of HIV by interfering with viral reverse transcriptase
- CNS penetration may also explain confusion, agitation & insomnia in 5%-10% people on Zidovudine.
- Can induce Mania or depression (like INH)
- In recent yrs fewer problems have been reported as lower doses of Zidovudine is used as compared to (2000mg 1day) in the pre-HAART Era.

HIV DRUGS AND PSYCHIATRY

- Zalcitabine ,stavudine and didanosine

↓

inhibits Nerve Growth factor(NGF) causes peripheral neuropathy

↓

thus cause headache, malaise, fatigue and pseududepressive symptoms

MENTAL HEALTH & HIV/AIDS
MEDICATION INTERACTIONS

- Antiretrovirals
  - 1A2
    - Induction by ritonavir & nelfinavir
  - 2C9
    - Induction by ritonavir & nelfinavir
    - Inhibition by delavirdine
  - 2C19
    - Induction by efavirenz & nelfinavir
    - Inhibition by efavirenz & delavirdine

MENTAL HEALTH & HIV/AIDS
MEDICATION INTERACTIONS

- Antiretrovirals
  - 2D6
    - Inhibition by ritonavir
  - 3A4
    - Induction by ritonavir, nelfinavir, efavirenz, nevirapine
    - Inhibition by ritonavir, fosamprenavir, indinavir, nelfinavir, saquinavir, tipranavir, delavirdine

MENTAL HEALTH & HIV/AIDS MEDICATION INTERACTIONS

- Antidepressants
  - Most metabolized at 2D6
  - Exceptions:
    - Fluvoxamine (Luvox)
      - AVOID
    - Nefazodone (Serzone)
      - AVOID or dose cautiously
    - Bupropion (Wellbutrin, Zyban)
      - **@ 400 mg, dose cautiously with ritonavir**

MENTAL HEALTH & HIV/AIDS MEDICATION INTERACTIONS

- Antidepressants
  - SSRIs
    - Fluoxetine (Prozac) & paroxetine (Paxil):
      - some interactions, but not clinically significant for most antiretrovirals
    - Citalopram (Celexa), escitalopram (Lexapro), & sertraline (Zoloft):
      - have fewest interactions

MENTAL HEALTH & HIV/AIDS MEDICATION INTERACTIONS

- Antidepressants
  - Tricyclic antidepressants
    - Generally well tolerated with antiretrovirals
    - Nortriptyline & desipramine (secondary amines)
      - Narrow metabolism at 2D6
      - Levels can be elevated by other medications
      - Get a blood level if in doubt

MENTAL HEALTH & HIV/AIDS
MEDICATION INTERACTIONS

- Antidepressants
  - Dual-action agents:
    - Venlafaxine (Effexor) & duloxetine (Cymbalta)
    - Well tolerated without adjusting dose
  - Mirtazipine (Remeron)
    - Well tolerated

MENTAL HEALTH & HIV/AIDS
MEDICATION INTERACTIONS

- Anxiolytics
  - Mostly metabolized at 3A4
  - **Avoid**

    Alprazolam (Xanax)

    Triazolam (Halcion)

    Midazolam (Versed)

MENTAL HEALTH & HIV/AIDS
MEDICATION INTERACTIONS

- Anxiolytics
  - Safest to use glucuronidated benzodiazepines:
    - Lorazepam (Ativan)
    - Temazepam (Restoril)
    - Oxazepam (Serax)
  - Caution with buspirone (Buspar), and dosing of other benzodiazepines with ART (3A4)

MENTAL HEALTH & HIV/AIDS
MEDICATION INTERACTIONS

Antipsychotics:

for use with ritonavir, start with low dose

1A2 & 2D6

- **Haloperidol (Haldol)** (risk EPS & TD)
  - Avoid chlorpromazine (Thorazine), thioridazine (Mellaril)
- **Olanzapine (Zyprexa)** & **clozapine (Clozaril)**

3A4

- **Aripiprazole (Abilify)** & **clozapine (Clozaril)**
  - Avoid pimozide (Orap)

MENTAL HEALTH & HIV/AIDS
MEDICATION INTERACTIONS

- Stimulants
  - Atomoxetine (Strattera*) * = nonstimulant
    - Caution with impaired hepatic function
    - Metabolized at 2D6
    - Inhibits at 2D6
  - Modafinil (Provigil) – be cautious
    - Metabolized at 3A4
    - Induces at 1A2 & 3A4

CHILDREN WITH HIV

- No studies addressing the impact of HIV infection on the mental health of children either affected or infected with HIV.
- 6.17 psychiatric cases per 1000 person-years.
- This was significantly higher than the incidence of 1.70 cases per 1000 person-years in the general pediatric population.
- The majority of patients were admitted because of depression or behavioural problems while 47 per cent underwent multiple psychiatric hospitalizations.

SUICIDE AND HIV INFECTION

- Suicidal ideation is prevalent in between 50 –70% of HIV positive individuals at various points in the course of their illness
- Suicide accounts for only a small proportion of deaths associated with HIV infection.
- Suicidal risk is the highest in the life of a person living with HIV:
  - at the time of diagnosis and
  - later at the onset of AIDS.

RISK FACTORS FOR SUICIDE IN PEOPLE WITH HIV INFECTION

- Historical factors
  - Past psychiatric history, especially depression
  - Past attempts at suicide or deliberate self-harm
  - History of sexual abuse

RISK FACTORS FOR SUICIDE IN PEOPLE WITH HIV INFECTION

- Situational factors
  - Waiting for HIV result if one suspects result may be positive
  - In the immediate aftermath of notification of a positive result (first two to three months)
  - Onset of symptoms, or AIDS related disease
  - Relationship problems or separation from partner
  - Bereavement, especially of a loved one through AIDS
  - Lack of social support
  - Work related problems
  - Multiple psychosocial stressors
  - Multiple physical illness (HIV infection and haemophilia and opportunistic infections)
  - Severe financial distress
  - Severe pain, dysfunction, or disfigurement

ASSESSING SUICIDAL RISK

- Always ask for suicidal ideation
- Assess frequency and severity of suicidal ideas
- Ask for previous suicidal attempts
- Assess if any preparations have been made
- Check for hopelessness, reasons of living

RISK FACTORS FOR SUICIDE IN PEOPLE WITH HIV INFECTION

- Psychological factors
  - Perceived social isolation and loneliness
  - Reliance on denial as the central defence mechanism; lack of the ‘fighting spirit’
  - Perception of self as a victim or as a burden on others
  - Hopelessness; lack of any ‘reasons for living’
  - Fear of complications of AIDS

STIGMA AND HIV

- HIV/AIDS as punishment (e.g. for immoral behaviour)
- HIV/AIDS as a crime (e.g. in relation to innocent and guilty victims)
- HIV/AIDS as war (e.g. in relation to a virus which must be fought)
- HIV/AIDS as horror (e.g. in which infected people are demonized and feared)

STIGMA AND HIV

- Stigma complicates the treatment of HIV worldwide
- vicarious stigma influenced felt normative stigma creates discrimination (enacted stigma)
- internalized stigma were associated with higher levels of depression

- **HIV-related stigma: Adapting a theoretical framework for use in India,TISS, NIMHANS social science and medicine 2008**

COUNSELLING IN HIV INFECTION

- Preventive counselling
- Preparing for an HIV test
- Coping with a positive test result
- Ongoing supportive counselling
- Problem solving
- Crisis intervention
- Grief & bereavement

PREVENTIVE COUNSELLING

- PREVENTIVE EDUCATION
  - safe sex
  - proper use of condoms
  - clean needle use
  - reconsider life style
  - spread HIV/AIDS prevention message

PRETEST COUNSELLING

- EMPHASISE CONFIDENTIALITY

- EXPLORE HIGH RISK BEHAVIOUR
  - Unsafe sex practices (consider spouse's behaviour)
  - I.V. Drug use (shared needles/Sex with user)
  - Blood/Blood products received

- EXPLORE HIV/AIDS KNOWLEDGE
  - Clarify misconceptions

PRETEST COUNSELLING

- EXPLORE TEST IMPLICATION: in relation to patient's life situation (eg: marriage, pregnancy ..)
- Explain test:- is for antibodies to HIV <u>not an AIDS test</u>
- Meaning of negative result & need for follow Up test
- Meaning of positive result
- Allow patient time to ask question
- Document in the chart (not in front of patient)

POST-TEST: TEST NEGATIVE

- explain negative result
- check back to confirm understanding
- clarify doubts/misconception
- need for retest or follow up test
- repeat preventive education

POST-TEST: TEST POSITIVE

- follow patients lead when to disclose
- state result clearly
- **wait** – give time to absorb information
- give time for expression of feelings
- **Listen and be empathetic**

POST-TEST: TEST POSITIVE

- Behavioural
  - assess commitment & understanding to risk reduction
  - explore factors related to general health and immune functioning
- Interpersonal
  - impact on partner, family, friends, employer
  - how to break news (offer help & support)
  - plan to maximize support & minimize stress
- Medical
  - Plan health/early intervention. Avoid quacks
  - Adherence issues
- life style issues
  - stress nutrition, exercise, no to substance , strategies to prevent re-exposure to virus.

WHO SHOULD KNOW RESULT ?

- Discuss implications/discrimination
- Partner notification/testing
- practicalities of test : sample collection, getting result, give appointment.
- assess strategies for coping
- evaluate past handling of stressful situations
- evaluate patient's social support network

GLOBAL MENTAL HEALTH

- Several correlates were associated with ADHD: Mpango RS, et al. BMC Psychiatry. 2017.
- Intersection of alcohol and HIV/AIDS Gordon S, et al. AIDS Behav. 2017.
- Smokers less likely to have low CD4 count at baseline and 6-month follow-up, but more likely to have low CD4 count at 12-month follow-up. Winhusen T, et al. AIDS Behav. 2017.
- Longitudinal trends in alcohol use among young women in South Africa represent a large economic, social, and health. Davis EC, et al. AIDS Behav. 2017.

GLOBAL MENTAL HEALTH

- Postnatal depression predicted cognitive delay; decreased prenatal male involvement predicted delayed gross motor development (ps < 0.05). Rodriguez VJ, et al. AIDS Behav. 2017.
- MBSR instruction proved beneficial for important psychological and HIV-disease outcomes. Webb L, et al. AIDS Care. 2017.
- Sexual bridging between MSM and women Cummings B, et al. AIDS Behav. 2017.
- Higher score of social support, especially emotional/informational support . Matsumoto S, et al. Sci Rep. 2017.

GLOBAL MENTAL HEALTH

- Anticipated HIV stigma and Individual-level internalized HIV stigma.Rendina HJ, et al. J Affect Disord. 2017.
- Long-term outcomes and cost-effectiveness are needed, particularly at the health system level and in regions with high HIV and AIDS burden. Chuah FLH, et al. Health Policy Plan. 2017.
- Increased partnerships between policy-makers, practitioners and researchers in order to design evaluation studies and can feed into the growing evidence base. Skeen S, et al. Vulnerable Child Youth Stud. 2017.

IMPLICATIONS

- Further research can be directed towards assessing service and development related to factors in HIV AIDS and mental health.
- Factors such as stigma, culture, misconceptions, attitudes towards psychiatric consultation in HIV/AIDS can be studied further.

IMPLICATIONS

- From a clinical point of view, focus on consultation liaison psychiatry and mental health services for patients with HIV/AIDS are recommended.
- Community based mental health care models for HIV/AIDS can be considered for further clinical research.