HIV and mental health
BETWEEN ANXIETY AND WELLBEING

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EATG European AIDS Treatment Group

EATG Training Academy
STEP-UP: Skills Training to Empower Patients

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- Prevalence of mental health issues
- Many faces, one root cause
- Holistic approach
- Screening
- Interventions
- Therapy
- Systemic changes

“The mind and the body are one”

Robert H. Remien

“Oh, just stop it!”

Gus Cairns

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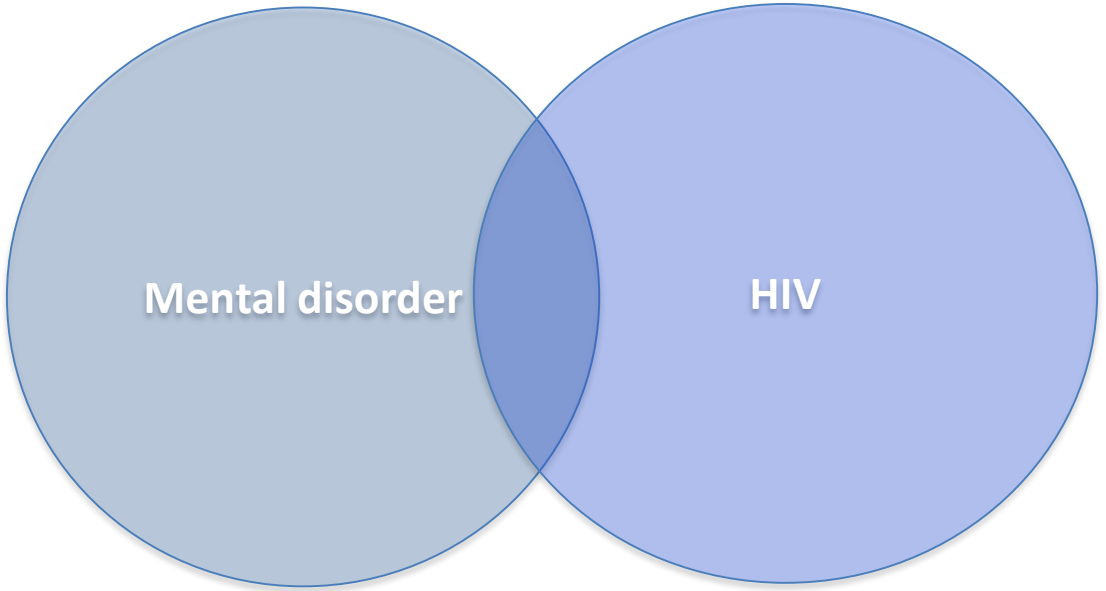
Prevalence of mental health issues in HIV+ populations

- Retrospective data from the US (n=7834) showed 53% had documented psychiatric condition (1)
  - Mood disorders are the most prevalent (1)
- Substance use is also common: 20–70%
- Similar results in developing countries (6)
  - Data from four similar studies in Africa showed that approximately half of PLWHIV had a psychiatric disorder (6)
- Data from face-to-face interviews (n=34,653)(7)
  - HIV more strongly associated with psychiatric disorders in men than in women (7)
- Adolescents and young adults are particularly at risk for mental health – **and HIV**!
- **BUT! The global burden of disease for mental health is generally very high.**

1. Parhami I, et al. *AIDS Behav* 2013; 17(8):2792–801; 2. Bing E, et al. *Arch Gen Psychiatry* 2001; 58(8):721−728; 3. Kessler RC, et al. *Arch Gen Psychiatry* 2005; 62(6):617−627; 4. Pence BW, et al. *J Acqui Immune Defic Syndr* 2006, 42(3):298-306; 5. Beyer JL, et al. *Psychosomatics* 2007; 48: 31−37;
6. Brandt R. *African J AIDS Res* 2009; 8:123−33; 7. Lopes M, et al. *J Clin Psychiatry* 2012; 73(3):384−391.
Slide from Dr. Jordi Blanch, 2016

MENTAL DISORDER AND HIV

Demographic
Age
Gender
Sexual orientation
Ethnicity



SES
Income
Education
Housing & food Security / insecurity

Biological
Chronic immune activation
HPA dysregulation
Other infections

Community
Density
Safety / violence

Intersecting stigmas
HIV
Gender / sexual minority
Substance use
Sex work

Psycho-social
Social support
Loss / bereavement
Trauma
Gender-based violence
Fear of illness

Environmental
Natural disasters
War & conflict
Climate & water
Migration

Adapted from R. Remien, CROI2018, http://www.croiwebcasts.org/console/player/37158?mediaType=slideVideo&&crd_fl=0&ssmsrq=1520514102943

MANY FACES, ONE ROOT CAUSE

- **Depression**
- An epidemic of loneliness
- Elevated anxiety, generalised anxiety
- Substance abuse
  - Alcohol
  - Tobbaco
  - Drugs
- Suicide
- Psychosis
- Somatic problems: insomnia, pain, fatigue, sexual dysfunction
- Non-somatic problems: shame, hopelessness

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WHAT IS DEPRESSION?

- A pan-cultural, cross-species condition
- Observed in reptiles, rats, cats, monkeys
- Evolutionary function: time out to allow healing. Prevents further injury by self or others. Models of causation:
  - 'Learned helplessness': self-preservation by dissociation from intolerable stress in hopeless situations ('flop')
  - Chronic unpredictable stress: ➔ dissociation from *anticipated* stress ('freeze')
  - Social defeat stress: In social animals, associated with loss of status and ejection from the group ('flee')
- Role of serotonin
- In conscious animals, can be triggered by and/or produce negative thoughts but does not *consist* of negative thoughts
- Clinical depression may be entrenched/perpetuated by negative cognitions: 'malignant sadness'

Slide from Gus Cairns, 2013

CROSS-SPECIES CHARACTERISTICS

- 'Slowed down' thinking and movement
- Anhedonia: inability to experience pleasure or positive affect
- Learned helplessness: loss of response where one wold be normal
- Reduced hippocampal volume ➔ reduced ability to make sense of environment and make decisions
- Disturbance of hypothalamic/pituitary/adrenal hormonal axis ➔ disconnect between appetite and response
- Disturbance of sleep/circadian rhythm: too much or too little sleep
- Similar disturbances in appetite: link with eating disorders

Slide from Gus Cairns, 2013

Hasler, G. et al. (2004) Discovering endophenotypes for major depression. Neuropsychopharmacology 29, 1765–1781

DEPRESSION IS VERY PREVALENT IN HIV

Prevalence (%)	USA (1)	USA (1)	EU (2)
	PLHIV	**Control**	**PLHIV**
Major depressive disorder	36	16.6	26
Dysthymia	26.5	2.5	17.3

Slide from Jordi Blanch, 2016

1. Bing E, et al. *Arch Gen Psychiatry* 2001; 58(8):721−728; 2. Schadé A, et al. *BMC Psychiatry* 2013; 13:35.

SUICIDE IN PEOPLE WITH HIV

"Of the remaining 10 studies…the calculated ''crude mean prevalence rate'' (without adjusting for sample size) indicates that suicide was the cause of death for **9.4%** of deceased HIV+ individuals. In the remaining two studies, one found that suicide was **7.4 times more likely** to be the cause of death for HIV-seropositive than HIV-seronegative individuals, and the other reported that **7%** of 75 non-AIDS deaths were due to suicide. Five (7.6%) studies reported **attrition due to suicide** with a calculated crude mean prevalence of **2.4%** for HIV+ participants committing suicide."

This same review also shows rates of 24% to 34% for recent suicidal ideation.

Slide from Gus Cairns, 2013

Catalan J et al. *HIV infection and mental health: Suicidal behaviour – Systematic review.* Psychol Health Med. 16(5):588-611. 2011.

DEPRESSION AND ADHERENCE
VERY CLEAR EVIDENCE

- Poor adherence = a risk behaviour
- Unlikely to be sole explanation for relationship between depression and mortality, as depression can increase many risk behaviours
- In UK study[1]: 24% who missed no doses in a week had any depressive symptoms; 34% who missed 1-2 doses; 42% who missed >2 doses
- Viral load:
  - In people with no depressive symptoms, 7.5% of those on ART >6 months had detectable virus; with any depressive symptoms, 16.3%.
- In US meta-analysis[2] of 95 studies (n=36,000) depression (assessed various ways) was associated with 20% poorer adherence overall
- NB *treated* depression associated in a number of studies with significantly *better*-than-average adherence[3]
- **Strong association between depression and adherence**

1 Lampe F et al. *Depression and virological status among UK HIV outpatients: results from a multi centre study.* 18th Annual Conference of the British HIV Association, Birmingham, abstract O10, 2012.
2. Gonzalez JS et al. *Depression and HIV treatment nonadherence*. JAIDS 58(2):181-7. 2011
3. Kong MC et al. *Association between race, depression, and antiretroviral therapy adherence in a low-income population with HIV infection.* J Gen Intern Med, online edition. DOI: 10. 1007/s11606-012-2043-3, 2012.
From Gus Cairns

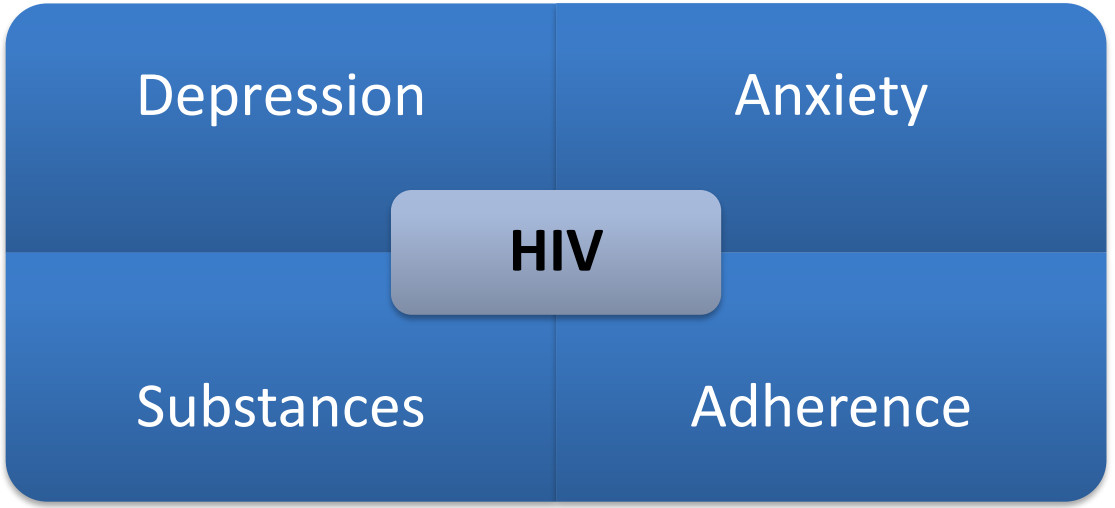
SUICIDE IN PEOPLE WITH HIV

- HIV infection is higher among certain at-risk groups, such as injecting drug users and patients with severe mental illness (1) (psychiatric – primary - comorbidity)
- Adjustment reaction to stressful life-events related to HIV infection (2) (psychological)
- Neurologic complications associated with HIV were recognized very early in the epidemic (3) (neurological)
- Medical conditions caused by HIV infection may produce psychiatric symptoms (4) (medical)
- Some HIV treatments can produce psychiatric side-effects (5) (toxic)

Slide from Jordi Blanch, 2016

1.Beyer JL, et al. *Psychosomatics* 2007; 48:31−37; 2. Patterson TL, et al. *Psychiatry*. 1995;58(4):299– 312; 3. Dube B, et al. *J Psychiatry Neurosci* 2005; 30(4):237–246; 4. Neurological Complications of HIV. Available at: http://www.hopkinsmedicine.org /healthlibrary /conditions/nervous_system_disorders/neurological_complications_of_hiv_134,46/ (accessed November 2013). , 5. Treisman GJ, Kaplin AI. *AIDS* 2002; 16:1201–1215.

HOLISTIC APPROACH



Minority stress model as a helpful tool.
Acknowledgement and acceptance of otherness.

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SCREENING FOR MENTAL HEALTH

- Difficulties for the healthcare / service provider
  - Diagnosing in a non-psychiatric setting
  - Uncomfortable topics
  - Lack of time
  - Depression is almost expected from HIV patients
- Difficulties for the patient and related to the illness
  - Some symptoms overlap
  - Stigma and shame
  - Low level of health awareness and education

SCREENING FOR MENTAL HEALTH

- It is crucial to provide the health care providers an effective tool to better detect depression so they can offer an appropriate treatment.
- The utilization of self-report scales could also improve physicians' and other health care providers‘ ability to screen depression in HlV- seropositive patients.
- Standardised and validated mental health screening tools are available

WHAT TO LOOK FOR?

- Depressed mood
- Loss of interest or pleasure
- Decrease in appetite
- Insomnia
- Psychomotor agitation or retardation
- Fatigue or loss of energy
- Feelings of excessive guilt
- Diminished ability to think or concentrate
- Recurrent thoughts of death, *recurrent suicidal ideation*

Simple tests are already available!

Slide adapted from Jordi Blanch, 2016

INTERVENTIONS IN CRITICAL SITUATIONS

- **S**tay
- **C**onsult
- **A**pprise
- **T**erminate
- **T**runcate
- **T**ransport

- Don’t belittle or bagatellise
- Stay with the person
- Administer first aid if needed
- Don’t blame
- Stop being cheerful
- Seek and provide help

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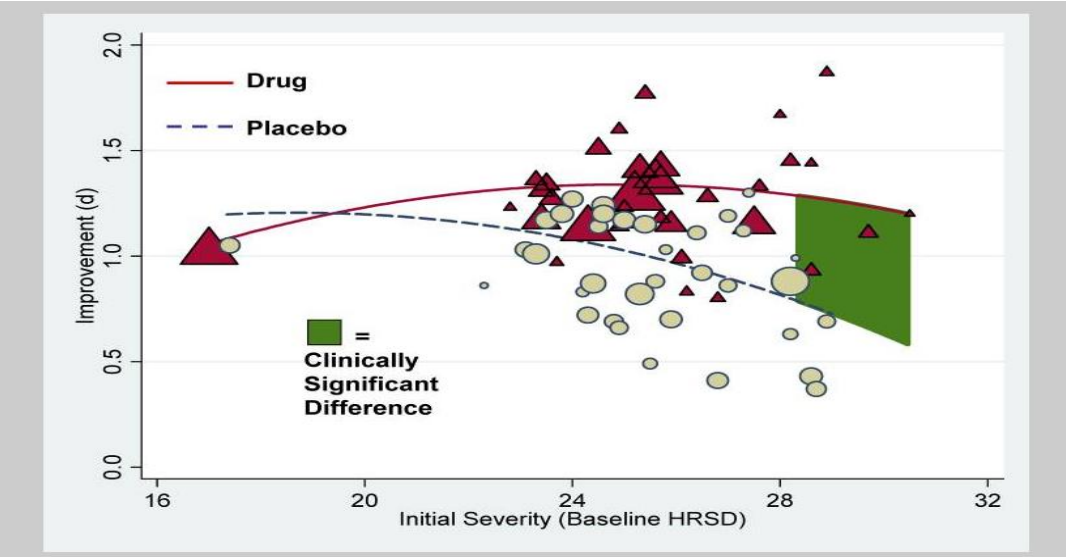
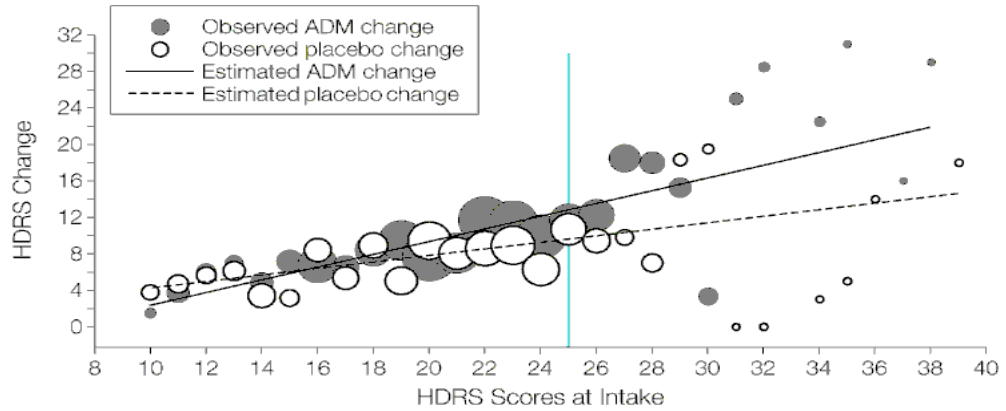
THERAPY AND LONGER TERM SOLUTIONS

- Mental health screening!
- Sometimes you MUST take a medicine
- Harm reduction approaches
- Therapy works – even if don't understand how
  - It is the relationship that heals
- It will not just go away, and you cannot sleep it out
- No quick fixes – but good progress possible

Efficacy of antidepressants





- Two FDA reviews in 2008 and 2010 concluded that overall effect size of SSRIs was **0.31**[1] or **0.36**[2]
- i.e. 31%-36% more people experienced an improvement than experienced an improvement on placebo
- Effect size only reached NICE efficacy threshold of 0.5 in patients with high baseline depression scores
- Some criticism of calculation of effect sizes, and of HRSD as instrument [tends to over-score sleep improvement and under-score changes in suicidal thoughts], but *no evidence* SSRIs work with other than severe depression
- Now recommended by NICE for severe depression or moderate depression that has not responded to psychotherapy

1 Kirsch I et al. Initial Severity and Antidepressant Benefits: A Meta-Analysis of Data Submitted to the Food and Drug Administration. PLoS Medicine 5(2): 2008
2. Fournier JC et al. Antidepressant Drug Effects and Depression Severity: A Patient-Level Meta-analysis. *JAMA* 303(1):47-53. 2010.

Efficacy of psychotherapy

- Considered as one activity, in studies with a well-defined control group, the effect size of 'n' sessions of any counselling and psychotherapy is **0.79**[1] = People who receive counselling and therapy have a 79% greater improvement in psychological distress scores than people in control groups
- Cf. overall effect size of medical procedures taken as a whole = c. **0.5**
- About 60% of patients/clients experience a clinically significant improvement from baseline
- NB Between 5% and 10% of people get worse in psychotherapy, possibly as a 'side effect'
- *However* only 18% more people, compared with people given normal GP care, achieve a complete resolution, i.e. from high psychological distress to none.
- This might be because of reversion to the mean, i.e. people refer themselves at times of peak distress and tend to get better naturally

Lambert MJ and Ogles BM. The efficacy and effectiveness of psychotherapy. In Begin and Garfield's Handbook of Psychotherapy and Behavior change, 5th Edition. Chicago: John Wiley and Sons. 2004.

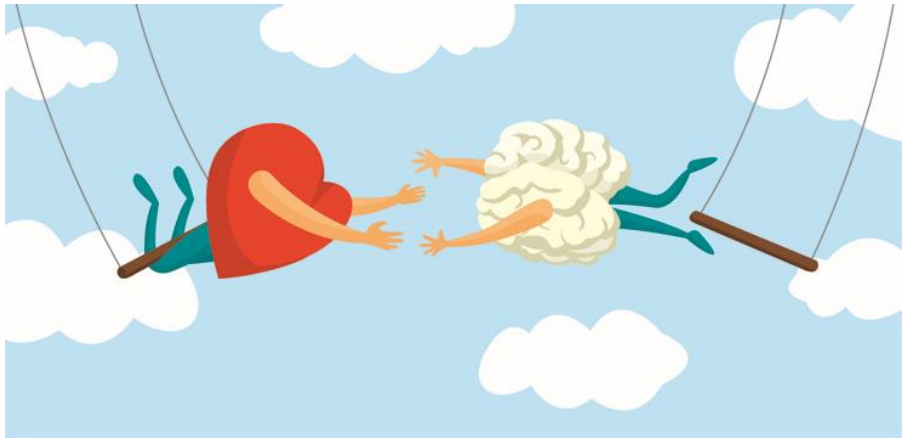
Adapted from Gus Cairns, 2013

What works in psychotherapy?

- Countless schools and theoretical models of psychotherapy
- Three or four very broad schools: cognitive-behavioural, psychodynamic, humanistic &, emerging now, holistic/somatic
- ‘Caucus race’ issue: “all have won and all must have prizes”: when individual orientations studied, they *all* tend to work
- CBT has most positive results: but probably only because it has been studied the most
- CBT definitely has an edge in anxiety disorders but somatic psychodynamic therapy may work better for severe trauma/PTSD
- In depression, at least eight different types have been shown to work in RCTs

SYSTEMIC CHANGES

- Task shifting and task sharing
- Mental health is dynamic
- Holistic approaches in health care
  - Mindfulness & Co.
  - Physical exercise
  - Wellbeing
- Education
- Fight against stigma and discrimination
- Community-based health care
- Normalisation of HIV
- Queer theory



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WHAT YOU CAN DO

- Mental health matters
- Wellbeing
- Exercise
- Nutrition
- Harm reduction including tobbaco and alcohol use
- Battling stigma = fight for human rights
- Collaborate, work together

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