

# Integrating Mental Health and HIV Services

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ICAP Grand Rounds

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*Photo (far right) courtesy of Bogomolets National Medical University*

# Question

What is required to successfully identify and treat a mental health condition in the people seeking care where you work?



# Defining Mental Health and Mental Disorders

## Mental Health

**Capacity of thought, emotion, and behavior** that enables every individual to realize their own potential in relation to their developmental stage...

## Mental Disorders

**Disturbances of thought, emotion, behaviour, and relationships** with others that lead to **substantial suffering** and **functional impairment in one or more major life activities**



*The term “mental health condition” is often used in place of “mental disorder” because of stigmatizing associations with the term disorder.*

# The continuum of mental health

Increasing severity of symptoms 

Interventions for each stage

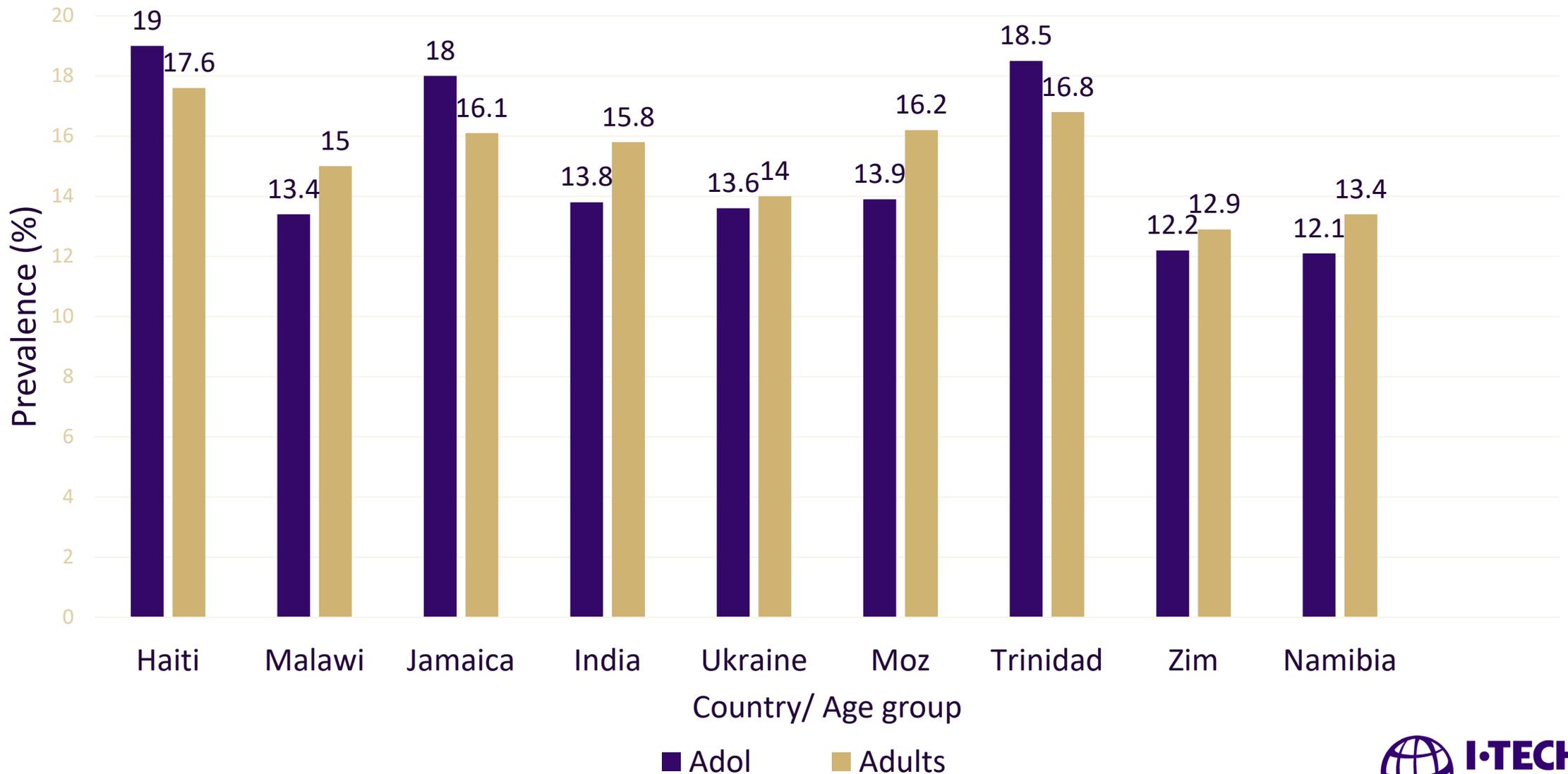


# Estimated global prevalence of mental disorders and substance use disorders

- 38 million people live with HIV
- **More than 1 billion people worldwide** live with mental or substance use disorders
- 15% of the global population
  - 15-49 year olds
    - Alcohol and drug use disorders: 124 million (3.2%)
    - Mental disorders: 566 million (14.7 %)
      - Depressive disorders: 168 million (4.4%)



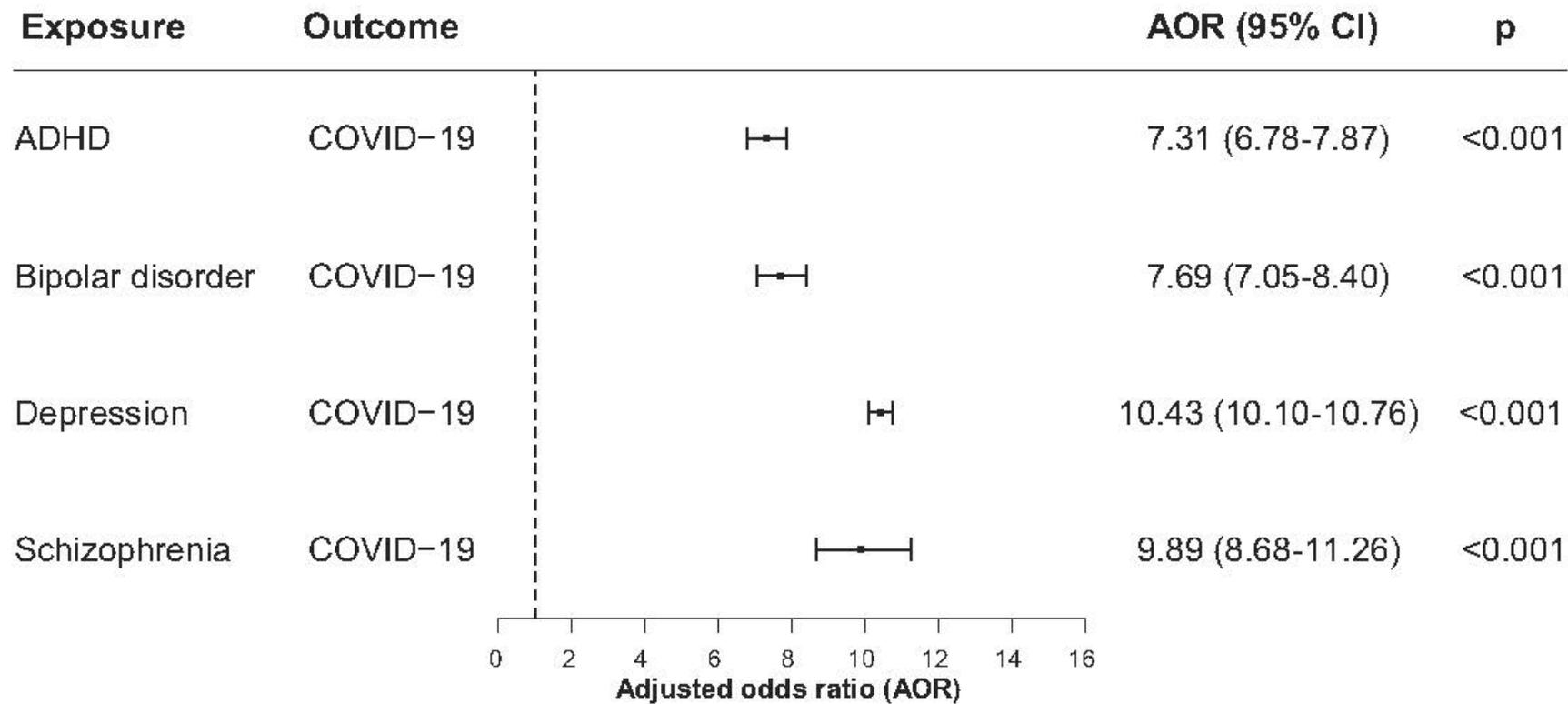
## Prevalence of Mental Disorders among Adolescents (15-19 y) and Adults (25-49 y) in Selected Countries – Global Burden of Disease 2019 data



# Consequences: Mortality and the Global Burden of Mental Disorders

- People with mental disorders have a mortality rate that is 2.2 times higher than the general population
- All cause mortality was elevated for psychoses, mood disorders, and anxiety
- All cause mortality for psychoses > anxiety, depression, and bipolar disorder
- Median of 10 years of potential life lost from all causes
- **8 million deaths per year are attributable to mental disorders**

# Co-occurring mental health conditions and increased risk of COVID-19



## GOVERNANCE GAP



### INADEQUATE POLICIES, PLANS AND LAWS

- Only 21% of countries report implementing policies and plans that fully comply with human rights instruments.



### MISPLACED PRIORITIES

- Two out of every three dollars spent on mental health goes to running psychiatric hospitals.

## RESOURCES GAP



### SCANT SPENDING

- Countries spend on average just 2% of their health budget on mental health.



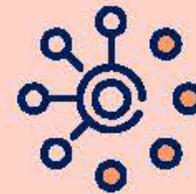
### LACK OF ESSENTIAL MEDICINES

- In LMICs, essential psychotropics are often unavailable or unaffordable.



### SCARCE WORKFORCE

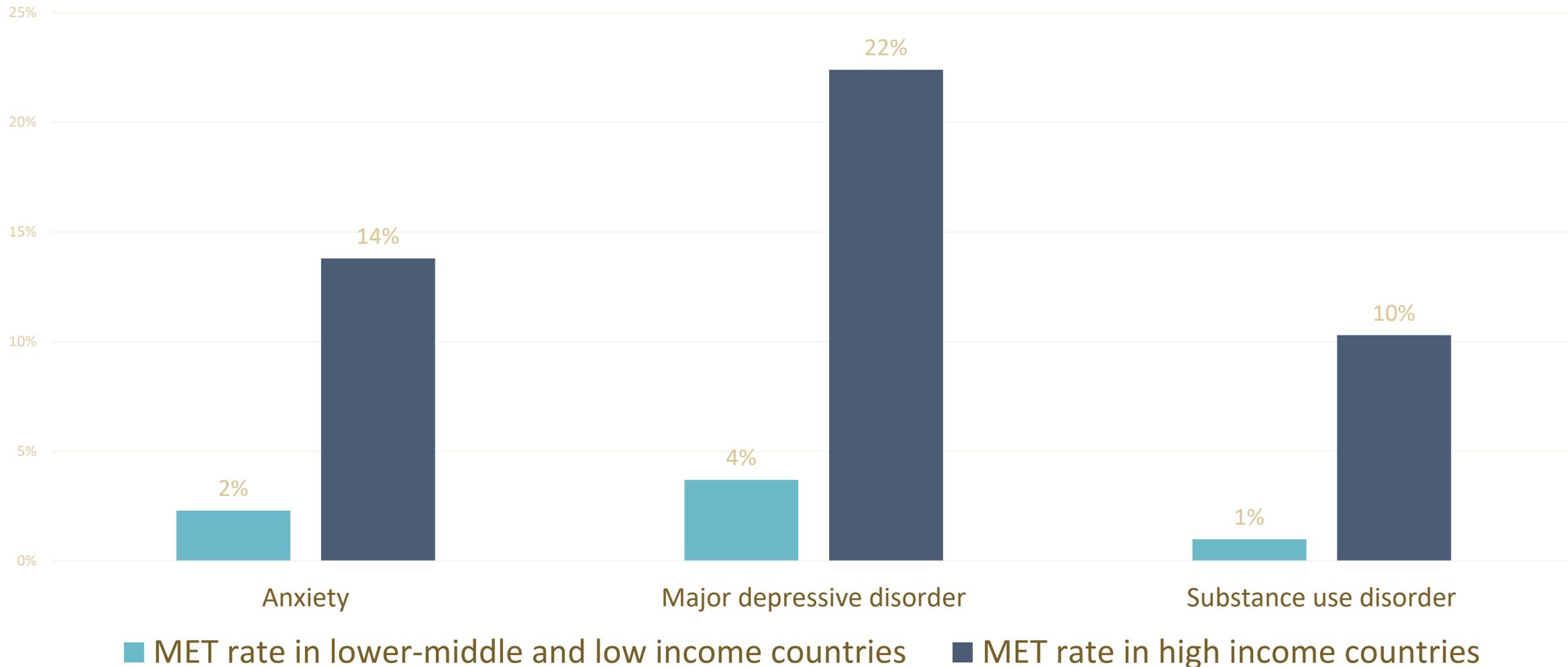
- In low-income countries, there are fewer than one mental health worker per 100 000 population.



### DIGITAL DIVIDE

- Most households in least developed countries do not have internet access

# The coverage of minimally effective treatment (MET) rates: depression, anxiety and substance use disorder



Alonso, J. et al (2018) Treatment gap for anxiety disorders is global: Results of the World Mental Health Surveys in 21 countries. *Depression and Anxiety*. DOI: 10.1002/da.22711

Thornicroft, G. et al (2017) Undertreatment of people with major depressive disorder in 21 countries. *British Journal of Psychiatry*, 210, 119-124

Degenhardt, L. et al (2017) Estimating treatment coverage for people with substance use disorders: an analysis of data from the World Mental Health Surveys. *World Psychiatry*, 16, 299-307

# Why integrate services?

## The relationship between HIV infection and mental health

## Shared determinants of mental health and HIV acquisition

### Demographic

- Age, gender
- Sexual orientation
- Ethnicity

### Biological

- Pre-existing illness/infections
- Maternal health status

### Cognitive and behavioral

- Low self-esteem, impulsivity
- Substance abuse
- Transactional sex

### Social and environmental

- Low socioeconomic status
- Adverse life events
  - Coercive sexual encounters
  - Interpersonal violence
- Social marginalization/exclusion
- Stigma & discrimination
- Abusive institutionalization

## Integrated responses

Screening for mental health problems

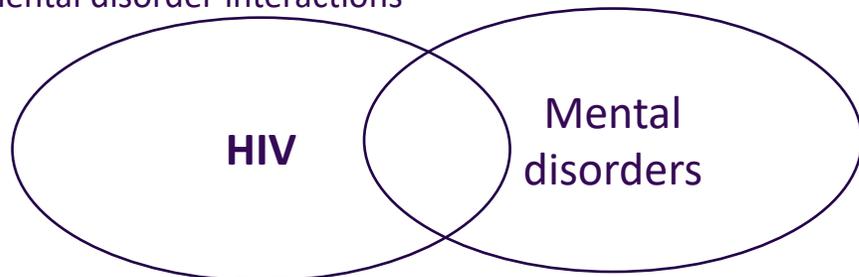
### Treatment

- Psychological interventions
- Pharmacologic interventions in HIV care/treatment settings

Decreased risk

Reduced risk behavior  
Improved adherence to prevention, treatment and care  
Linkage and retention in care

HIV and mental disorder interactions



Comorbidity and increased risk

### Chronic disease consequences

#### Public health impact

- High prevalence
- High disease burden
- Higher mortality
- Large unmet need (insufficient detection)

#### Social and economic impact

- Reduced productivity
- impoverishment
- Large unmet need (insufficient detection)

# Prevalence of HIV among people with severe mental illnesses

	Prevalence (95% CI)	Number of Studies
North America	6.0% (4.3 - 8.3)	21
Europe	1.9% (0.8 - 4.8)	5
Africa	19.2% (14.4 – 25.2)	8
Central/South America	2.7% (0.8 – 8.2)	5
Asia	1.5% (1.0 – 2.4)	5

# Prevalence of HIV among people with severe mental illnesses

	Prevalence (95% CI)	Number of Studies
North America	6.8% (4.3 – 9.3)	3
Europe	14.3% (10.3 – 18.3)	1
Africa	19.2% (14.4 – 25.2)	8
Central America	31% (21.5 – 40.5)	1
Asia	19% (14.5 – 23.5)	1

Uganda: HIV prevalence in women with mental illness: 14.3%  
 HIV prevalence in women in general population: 8.3%  
 Lundberg et al 2015

Botswana: HIV prevalence among 955 hospitalized people with mental illness: 31%  
 HIV prevalence in hospitalized women: 53%  
 HIV prevalence among women in general population: 38.5%  
 HIV prevalence among hospitalized men: 19%  
 Opongo et al 2019

# Prevalence of depression among people living with HIV

- North American estimates: 32-42%
- India and China estimates: 59-61%
- Sub-Saharan Africa estimates: 24.4%



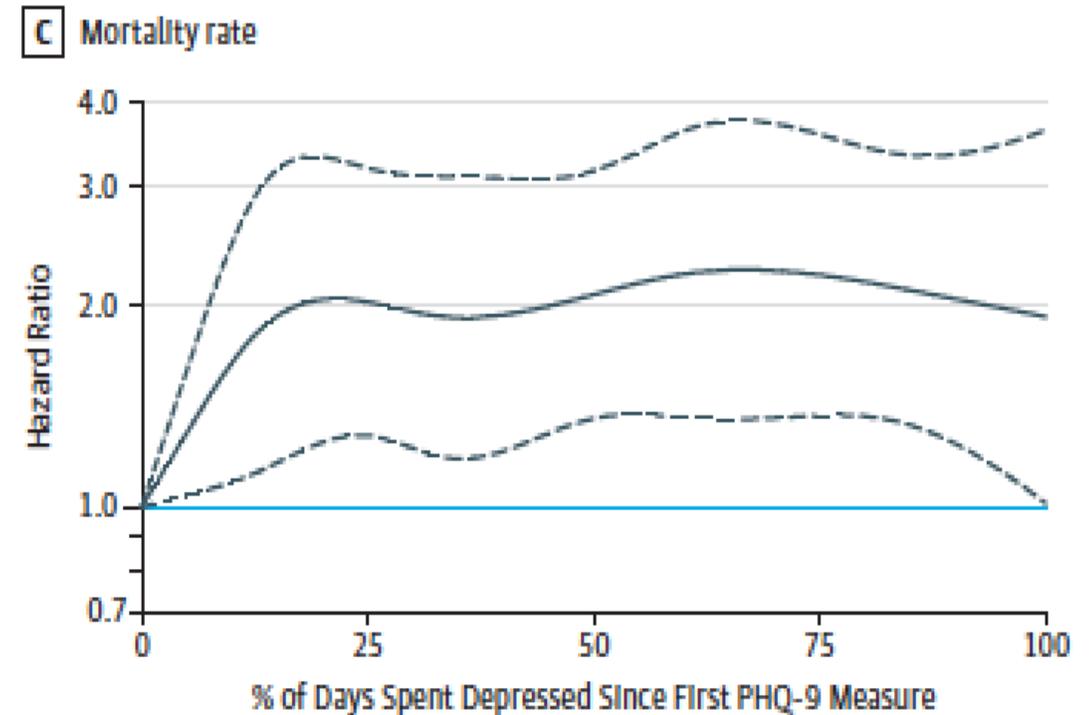
# Co-morbid depression and HIV infection

- Predictors of depression:
  - female gender, older age, unemployment, negative life events, childhood trauma, greater number of HIV-related physical symptoms, low CD4 counts, impaired function, and poor social support
- Consequences of depression in HIV
  - **Barrier to HIV testing, poor adherence to care, attrition from care, higher mortality, increased sexual risk behavior** (Nall et al, 2019; Uthman et al 2014, Mayston et al 2012, Krumme et al 2014, Musisi et 2014, Antelman et al 2007, Sudfield et al 2017)

# Longer depression yields worse HIV care outcomes

- **Dose-response relationship between depression length and HIV outcomes**
- 5927 US individuals living with HIV
- Each 25% ↑ in %days with depression
  - 19% ↑ risk of mortality
- New data from 4 African countries shows similar trends but greater risk of mortality

(Kemp et al, 2022)



Source: Pence et al, JAMA Psychiatry, Feb 21 2018

# Cumulative depression is associated with risk of all-cause mortality among adults living with HIV in Kenya, Tanzania, Uganda, and Nigeria in the African Cohort Study (AFRICOS)

- 2520 eligible participants (2013 – 2020)
- 1479 (59%) were women

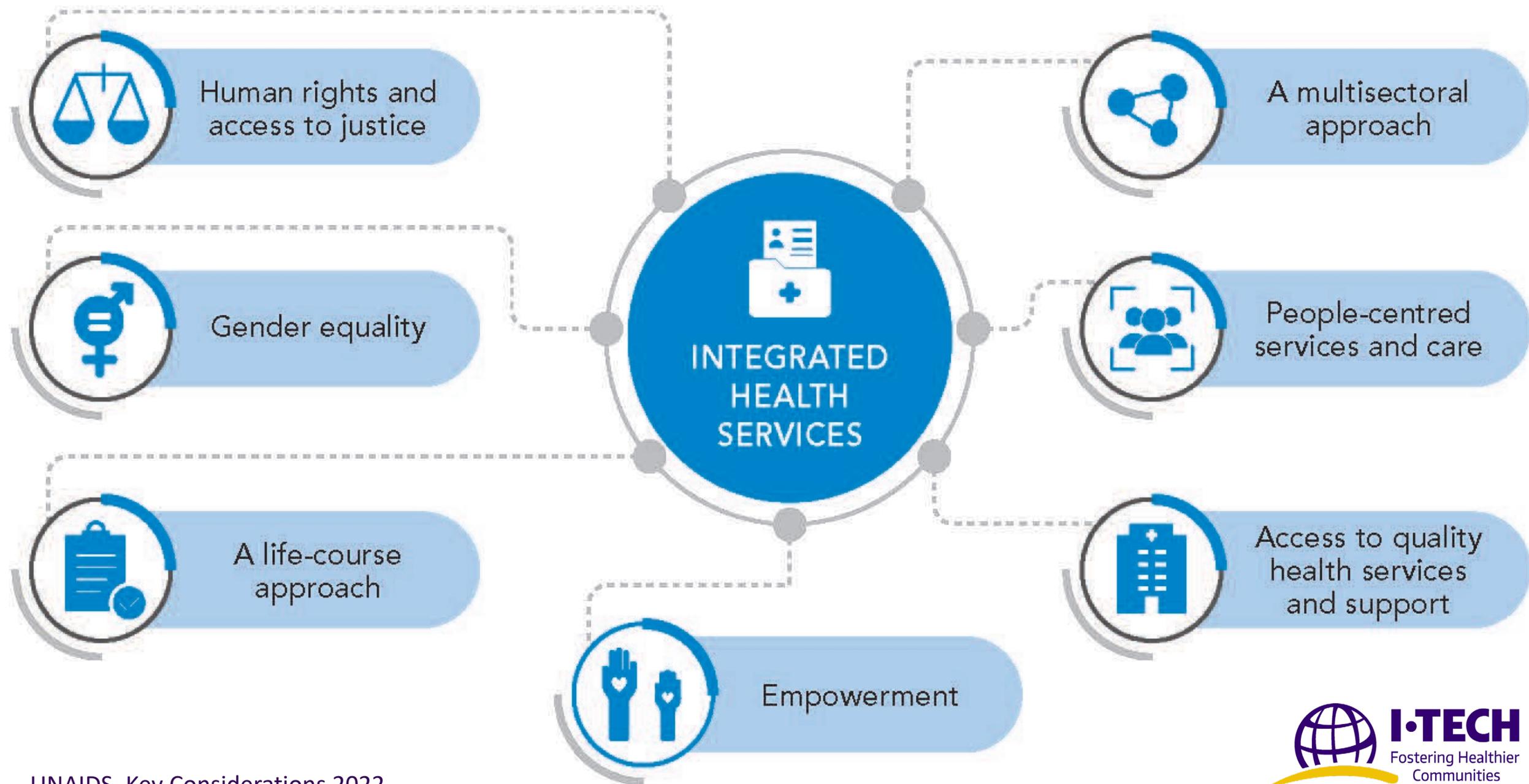
At baseline:

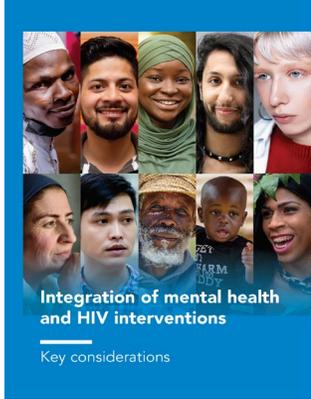
- Median age: 38
- 1438 (57%) virally suppressed (<200 copies/mL)
- 457 (18%) - possible depression (CES-D  $\geq$  16).

**Each 25% increase in PDD was associated with a 69% increase in the risk of all-cause mortality (HR: 1.69; 95% CI: 1.18-2.43).**

# Summary: Why integrate mental health care?

- The prevalence and burden of mental health conditions are high
- Mental and physical health problems are interwoven
  - Co-occurring mental health conditions increase morbidity and mortality
- The treatment gap for mental health conditions is very large
- Primary care for mental health enhances access
- Primary care for mental health generates good health outcomes





# 2025 HIV targets



**LESS THAN 10%**  
 LESS THAN 10% OF PEOPLE LIVING WITH HIV AND KEY POPULATIONS EXPERIENCE STIGMA AND DISCRIMINATION

**LESS THAN 10%**  
 OF PEOPLE LIVING WITH HIV, WOMEN AND GIRLS AND KEY POPULATIONS EXPERIENCE GENDER BASED INEQUALITIES AND GENDER BASED VIOLENCE

**LESS THAN 10%**  
 OF COUNTRIES HAVE PUNITIVE LAWS AND POLICIES

*People living with HIV and communities at risk at the centre*

**95% OF PEOPLE AT RISK OF HIV USE COMBINATION PREVENTION**

**95-95-95% HIV TREATMENT**

**95% OF WOMEN ACCESS SEXUAL AND REPRODUCTIVE HEALTH SERVICES**

**95% COVERAGE OF SERVICES FOR ELIMINATING VERTICAL TRANSMISSION**

**90% OF PEOPLE LIVING WITH HIV RECEIVE PREVENTIVE TREATMENT FOR TB**

**90% OF PEOPLE LIVING WITH HIV AND PEOPLE AT RISK ARE LINKED TO OTHER INTEGRATED HEALTH SERVICES**

**THEMATIC SEGMENT:  
 MENTAL HEALTH AND HIV/AIDS –  
 PROMOTING HUMAN RIGHTS,  
 AN INTEGRATED AND  
 PERSON-CENTRED APPROACH  
 TO IMPROVING ART ADHERENCE,  
 WELL-BEING AND QUALITY OF LIFE**



## Universal Health Coverage and integrated care

*...services are integrated and focused on the needs of people and communities...*

*...reorienting health services to ensure that **care is provided in the most appropriate setting**, with the right balance between out- and in-patient care and strengthening the coordination of care*

# Managing mental health in the community: Evidence for Task-sharing



## • Examples in diverse settings

- Democratic Republic of Congo (Bass et al, 2013)
- India – MANAS trial (Patel et al., 2010)
- Pakistan – Lady Health Workers ( Rahman et al, 2008)
- Uganda – Group IPT for depression (Bolton et al, 2003)
- Chile – Treating depression in primary care (Araya et al, 2003)
- Zimbabwe – Treating common mental disorders in primary care (Chibanda et al 2015)
- India/Pakistan – Peer-delivered Thinking Healthy Program for perinatal depression (Sikander et al, 2019)

JAMA | Original Investigation

### Effect of a Primary Care–Based Psychological Intervention on Symptoms of Common Mental Disorders in Zimbabwe A Randomized Clinical Trial

Dixon Chibanda, MD; Helen A. Weiss, DPhil; Ruth Verhey, MSc; Victoria Simms, PhD; Ronald Munjoma, SLC; Simbarashe Rusakaniko, PhD; Alfred Chingono, MSc; Epiphania Munetsi, MPhil; Tarisai Bere, BA; Ethel Manda, BSc; Melanie Abas, MD; Ricardo Araya, PhD

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

### Controlled Trial of Psychotherapy for Congolese Survivors of Sexual Violence

Judith K. Bass, Ph.D., M.P.H., Jeannie Annan, Ph.D., Sarah McIvor Murray, M.S.P.H., Debra Kaysen, Ph.D., Shelly Griffiths, M.S.W., Talita Cetinoglu, M.A., Karin Wachter, M.Ed., Laura K. Murray, Ph.D., and Paul A. Bolton, M.B., B.S.

# Managing mental health in the community:

Task shifting/sharing to deliver mental health interventions to people living with HIV

*Growing evidence base in African countries*

## PLOS MEDICINE

### Articles

**Effectiveness and cost-effectiveness of group support psychotherapy delivered by trained lay health workers for depression treatment among people with HIV in Uganda: a cluster-randomised trial**



Etheldreda Nakimuli-Mpungu, Seggane Musisi, Kizito Wamala, James Okello, Sheila Ndyabangi\*, Josephine Birungi, Mastula Nanfuka, Micheal Etukoit, Chrispus Mayora, Freddie Ssengooba, Ramin Mojtabai, Jean B Nachege, Ofir Harari, Edward J Mills



## PLOS MEDICINE

RESEARCH ARTICLE

**A peer-facilitated psychological group intervention for perinatal women living with HIV and depression in Tanzania-Healthy Options: A cluster-randomized controlled trial**

Sylvia Kaaya<sup>1</sup>, Hellen Siril<sup>2</sup>, Mary C. Smith Fawzi<sup>3</sup>, Zenaice Aloyce<sup>2</sup>, Ricardo Araya<sup>4</sup>, Anna Kaale<sup>2</sup>, Muhummed Nadeem Kasmani<sup>3</sup>, Amina Komba<sup>2</sup>, Anna Minja<sup>2</sup>, Angelina Mwimba<sup>2</sup>, Fileuka Ngakongwa<sup>2</sup>, Magreat Somba<sup>2</sup>, Christopher R. Sudfeld<sup>5</sup>, Elysia Larson<sup>6,7\*</sup>

JAMA | **Original Investigation**

**Effect of a Primary Care–Based Psychological Intervention on Symptoms of Common Mental Disorders in Zimbabwe**  
A Randomized Clinical Trial

Dixon Chibanda, MD; Helen A. Weiss, DPhil; Ruth Verhey, MSc; Victoria Simms, PhD; Ronald Munjoma, SLC; Simbarashe Rusakaniko, PhD; Alfred Chingono, MSc; Epiphania Munetsi, MPhil; Tarisai Bere, BA; Ethel Manda, BSc; Melanie Abas, MD; Ricardo Araya, PhD

RESEARCH ARTICLE

**Peer-led counselling with problem discussion therapy for adolescents living with HIV in Zimbabwe: A cluster-randomised trial**

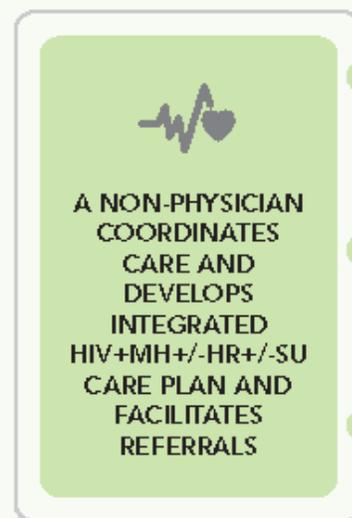
Victoria Simms<sup>1\*</sup>, Helen A. Weiss<sup>1</sup>, Silindweyinkosi Chinoda<sup>2</sup>, Abigail Mutsinze<sup>3</sup>, Sarah Bernays<sup>4,5</sup>, Ruth Verhey<sup>2</sup>, Carol Wogrin<sup>3</sup>, Tsitsi Apollo<sup>6</sup>, Owen Mugurungi<sup>6</sup>, Dorcas Sithole<sup>7</sup>, Dixon Chibanda<sup>2,4,8‡</sup>, Nicola Willis<sup>3‡</sup>



- Clinical & community integration
- Professional integration; Organizational integration
- Integration of service delivery systems

 **LEVEL 1  
CLINICAL & COMMUNITY INTEGRATION**

Community-led education, case-finding, support, advocacy



# Strategies for integrating mental health into HIV care

- What to integrate?
  - Care for conditions that occur commonly in HIV care: *depression, anxiety, trauma, and management of alcohol use disorders*
  - Treatments include **psychological therapies** and **medications**
  - Psychological interventions can be delivered by non-specialists with adequate support

# Evidence-based Psychological Interventions

Intervention	Recommended for
<b>Behavioural activation</b>	<ul style="list-style-type: none"> <li>▶ Depression</li> </ul>
<b>Relaxation training</b>	<ul style="list-style-type: none"> <li>▶ Depression</li> </ul>
<b>Problem-solving treatment</b>	<ul style="list-style-type: none"> <li>▶ Depression</li> </ul>
<b>Cognitive-behavioural therapy</b>	<ul style="list-style-type: none"> <li>▶ Depression</li> <li>▶ Child and adolescent mental health conditions</li> <li>▶ Substance use conditions</li> <li>▶ Psychoses</li> </ul>
<b>Contingency management therapy</b>	<ul style="list-style-type: none"> <li>▶ Substance use conditions</li> <li>▶ Psychoses</li> </ul>
<b>Family counselling or therapy</b>	<ul style="list-style-type: none"> <li>▶ Depression</li> </ul>
<b>Interpersonal therapy</b>	<ul style="list-style-type: none"> <li>▶ Depression</li> </ul>
<b>Motivational interviewing and motivational enhancement therapy</b>	<ul style="list-style-type: none"> <li>▶ Substance use conditions</li> <li>▶ Child and adolescent mental and behavioural health</li> </ul>
<b>Family-oriented treatment approaches, including parenting skills</b>	<ul style="list-style-type: none"> <li>▶ Depression</li> <li>▶ Anxiety</li> <li>▶ Traumatic stress</li> </ul>
<b>Common elements treatment approach</b>	<ul style="list-style-type: none"> <li>▶ Depression</li> <li>▶ Anxiety</li> <li>▶ Traumatic stress</li> <li>▶ Substance use conditions</li> </ul>

# How do these treatments work cross-culturally?

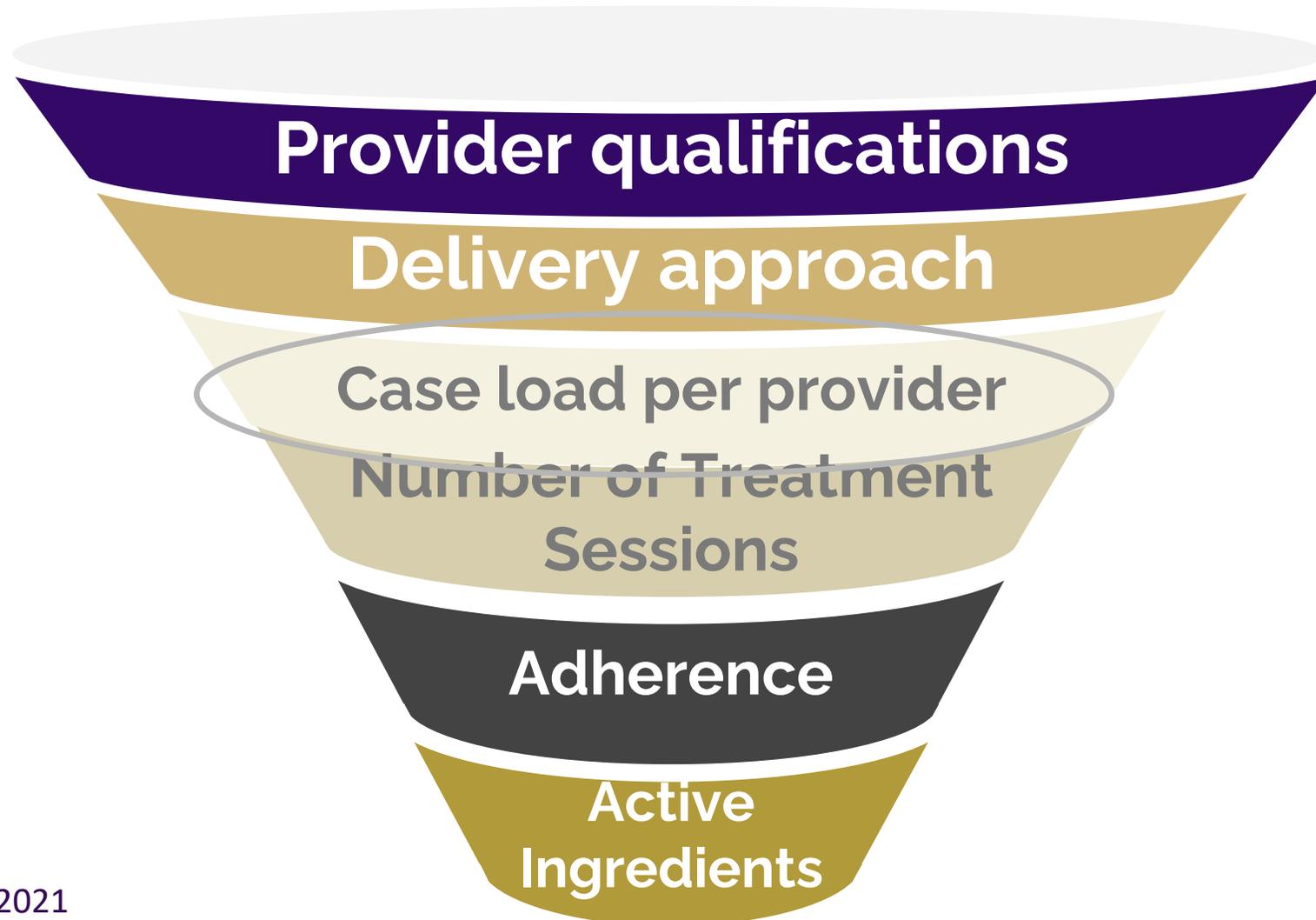
## *A South African example*

- Cognitive-behavioral therapies show effectiveness cross-culturally
- What are the cognitive or behavioral constructs most important for understanding and treating depression among PLHIV in South Africa?
- Cognitive construct: rumination, thinking too much
- Behavioral construct:
  - Behavioral activation associated with
    - reduction of depressive symptoms,
    - improved quality of life
    - reduced functional impairment
  - Behavioral activation may be of particular treatment value in this context

# Psychological Interventions for People Living with HIV in low and middle-income countries

- Cognitive behavioral therapy-based interventions
- Problem-solving therapy
- Psychosocial support groups
- Mindfulness based intervention
- Rational emotive behavioral therapy for alcohol use problems
- Brief alcohol interventions

# Intervention Components and effectiveness



# Active Ingredients of Interventions

- **Relaxation**
- **Meditation**
- **Psychoeducation**
- ***Venting***
- **Social support**
- ***Coping skills***
- **Problem solving**
- ***Cognitive restructuring***

- **Livelihood skills**
- **Behavioral activation**
- **Physical activity**

*> 3 active ingredients  
associated with intervention  
effectiveness*

# How to integrate services

- Plan

- Assess goals, functions and resources (human and financial) of the program
  - Know the existing knowledge and skills of the health care providers
  - Can they identify common mental health problems?
  - Do they know when to refer?
  - Are they motivated to build new skills?
  - How do they perceive the benefits of new skills?
  - Do providers view these skills as helpful for their primary responsibilities?

# Integrating services - II

- Planning (continued)
  - Identify shared and achievable objectives
    - Conduct joint assessment of needs and feasibility of integration
    - Identify the exact tasks for health care workers
    - Specify the training, support and supervision for clinicians to provide services
  - Assign responsibilities and establish a monitoring mechanism
    - Assign responsibilities to health care providers and to managers of the priority program and to the mental health team

# Integrating services - III

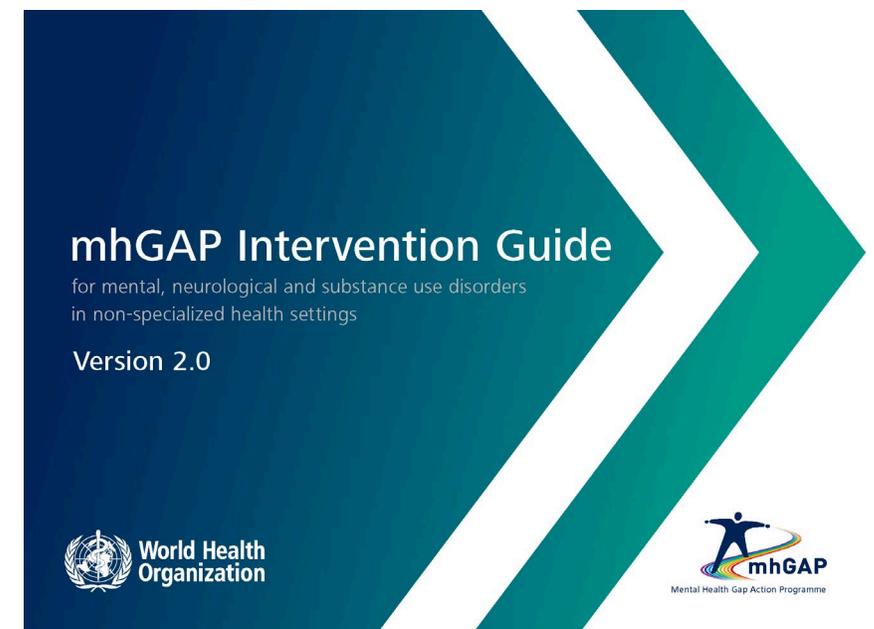
- Prepare

- Tasks and Human Resources

- mhGAP Intervention Guide and Operations Manual describe how to deliver evidence-based care for mental, neurological, and substance use disorders



Managers must determine **which** providers will develop **which** complementary skill sets in order to deliver the elements of these interventions and manage a range of health problems



# Integrating services - IV

- Prepare
  - Tasks and human resources (continued)
    - **Specify skill sets for available human resources – who will carry out these tasks?**
      - Screening, engagement, education of patients and family members, close follow-up and tracking of adherence and clinical outcomes
      - Targeted, evidence-based psychological interventions
      - Pharmacologic treatment
      - Population-based outcomes tracking and quality improvement
      - Specialist supervision and consultation

# Integrating services - V

- Provide

- Provide services in facilities that are coordinated and holistic, managing physical and mental health care
- Use a multilevel approach that provides integrated interventions and focuses on broader social determinants of health



Social support and stigma reduction are important elements of integrating care

- Monitor and evaluate

- Develop and apply a framework for monitoring and evaluation progress and outcomes

# Integrating services - VI

- Standardization of the integrated care package is needed for scaled integration
- Evidence-based models for integrated mental health care exist. The Collaborative Care Model is the most researched example
- Effective development and implementation of integrated care requires ongoing iterative adaptation, hypothesis testing, performance data monitoring, and improvement

# HIV Prevention and Mental Health

- What do we know about the relationship between mental health and HIV prevention or risk behaviors?
- What do we know about interventions that address mental health in the context of HIV prevention?

# Relationship between mental health-related symptoms and HIV prevention behaviors



## Worse PreP Adherence

More depressive symptoms

Exceptions



## More HIV Testing

Fewer mental health-related symptoms

Exceptions



## Inconsistent Condom use or efficacy

More symptoms of depression or PTSD



# What works for HIV prevention and improving mental health?



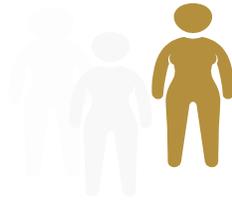
## Systems level

Effective linkages between services

- HIV Testing
- Mental health services
- Legal & other services

Trusted community organization

Robust peer network



## Individual level

Evidence-based psychological interventions

- Cognitive behavioral therapy approaches

Structured HIV risk reduction interventions



## Structural Interventions

Show promise:

- Cash transfers
  - fewer depressive symptoms for boys
- delayed sexual debut for boys & girls

# Integrating HIV and mental health interventions

- Global AIDS Targets for 2025 call for
  - linkage to mental health services for 90% people at high risk of HIV
  - Reduction in punitive laws and policies; stigma and discrimination; gender inequality & violence
- Optimize social interventions that can reduce HIV risk and risk for mental health conditions

# Address these Considerations for Integrating Care

- Contextual adaptation of interventions
- Adequate human resources – task-sharing can help
- Lay providers may be more acceptable
- Frequency of visits and attrition
- Referral pathways for stepped care
- Ongoing coaching/supervision
- Medications - availability
- Adapt health information systems
- Emotional support for providers

# Action steps for integrated intervention

- Identify community partners/leaders for co-design, delivery and linkage of HIV and mental health resources
- Facilitate integration of sexual health promotion into mental health care settings

# Action steps for integrated intervention

- Resume studies to promote sexual health and HIV prevention for people with severe mental illnesses
  - Recognize that establishing intimacy and options for consensual sexuality is part of recovery



Please join UNAIDS and the World Health Organization on the global launch of the UNAIDS-WHO publication:

## **Integration of mental health and HIV interventions: Key considerations**

The webinar will highlight key contents of the new publication, draw attention to the interlinked issues of HIV and mental health, and share global, regional and country learnings on integration of HIV and mental health interventions for health, wellbeing and quality of life.

**2 May 2022**

14:00–16:00 CET

**Join Zoom Meeting:**

**<https://bit.ly/399K4bH>**

Meeting ID: 867 4061 5742

Passcode: 333609

