# Co-Occurring Mental and Physical Health Conditions

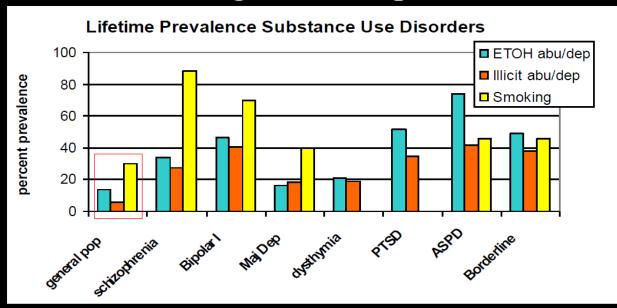
Olawale Ojo MD

 Complex co-morbidities of mental illness and addiction is the rule and not the exception

#### Scope of the problem- numbers

- 2017 National Survey on Drug Use and Health (NSDUH)
- 18 years and older
- Substance use 18.7 million (7.6%)
  - 36.4% use illicit drugs
  - 75.2% alcohol
  - 11.5% had both alcohol and illicit drug use
- Mental illness- 46.6 million (18.9%)
  - 24% had SMI
- Both SUD and MI- 8.5 million people (3.4%)

#### Dual Diagnosis: Scope of the Problem



- •General pop, schizophrenia, bipolar, unipolar, dysthymia (ECA data early 1980's) Regier et al.( JAMA,1990)
- •PTSD (NCS data early 1990's) Kessler et al. (Arch. Gen Psy,1995)
- •Borderline (1980's 1990s), Trull et al. (Clin Psy Rev, 2000)
- •All smoking data (1980 local outpt study), Hughes et al. ( Am J Psy,1986)

MI

Dual Dx

-Majority

-Sickest

-Most homeless

-Most incarcerated

-Least adequately studied

-Least adequately treated

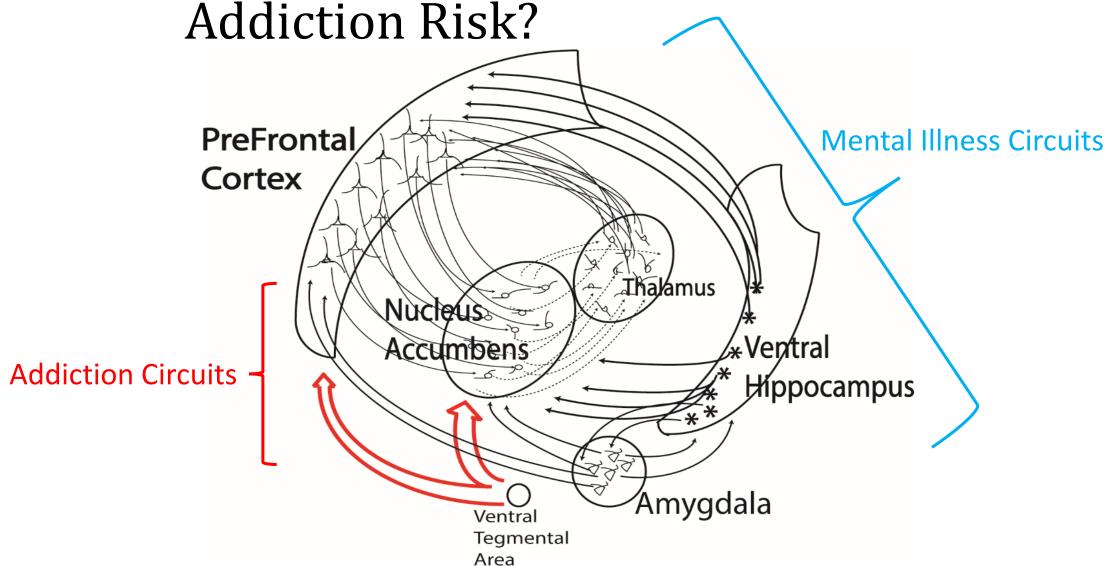
## Psychiatric Disorders have higher prevalence of OUD

- Pre-existing Psychiatric disorder and risk of OUD
  - •GAD: 11x risk
  - Bipolar disorder: 10x risk
  - Panic disorder: 7x risk
  - •MDD: 5x risk

## OUD have higher prevalence of psychiatric disorders

- Pre-existing opioid dependence and risk of mental illness
  - •9 x risk of Panic disorder
  - 5 x risk of MDD5x risk of Bipolar
  - 4x risk of GAD

How does Mental illness generate



Adapted From: Chambers "The 2 x 4 Model", Routledge/CRC press, New York, 2018

### Why?

SUD and mental illnesses share common factors

- Shared brain circuitry for both mental illness and SUD
- Genetic and epigenetic factors
- Stress and Early life adversities
- Social and contextual: social support and isolation

#### SUD + Mental health

- Earlier onset of disease
- More severe disease course
- Diagnostic confusion (imitate, mask, mimic, exacerbate)
- Poor adherence to treatment
- Worse dysfunction
- More service days- days in ER, hospitals, and Mental health services
- Violence, incarceration
- Poor outcomes- morbidity and mortality

#### Medical comorbidities

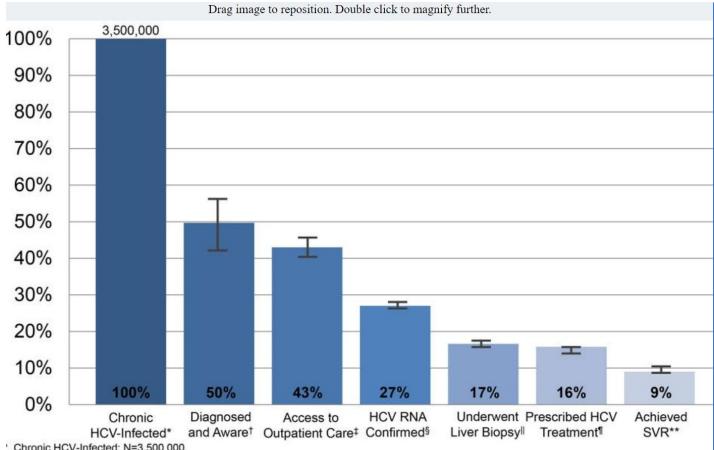
- Organ systems
- Disease category
- Substance type
- Route of administration

#### Medical co-morbidities

- Cardiovascular- QTc prolongation with methadone and arrythmias
- GI: direct hepatic toxicity and from infectious diseases, constipation
- Renal: heroin nephropathy
- Endocrine: Osteopenia, amenorrhea, alterations in gonadotropins
- Infectious disease: Cellulitis, Osteomyelitis, endocarditis, HIV, Hep C
- Pregnancy; NAS
- Pulmonary: overdose, aspirations, pulmonary edema

#### **HCV**

- Leading cause of cirrhosis, hepatocellular cancer and liver transplant in the U.S
- 3.2 million individuals are infected in the U.S.
- 70% of PWID age 30 years and above
- Up to 75% of those infected are unaware
- 80% develop chronic Hep C
- Risks factors: IVDU, intra nasal drug use, multiple sexual partner, children born to HCV+ mothers, blood transfusion before 1992, incarceration



Not many know they are infected and even fewer complete treatment!

Chronic HCV-Infected; N=3,500,000.

Calculated as estimated number chronic HCV-infected (3,500,000) x estimated percentage diagnosed and aware of their infection (49.8%); n=1,743,0 Calculated as estimated number diagnosed and aware (1,743,000) x estimated percentage with access to outpatient care (86.9%); n=1,514,667. 3 Calculated as estimated number with access to outpatient care (1,514,667) x estimated percentage HCV RNA confirmed (62.9%): n=952.726. Calculated as estimated number with access to outpatient care (1,514,667) x estimated percentage who underwent liver biopsy (38.4%); n=581,632. Calculated as estimated number with access to outpatient care (1.514.667) x estimated percentage prescribed HCV treatment (36.7%); n=555.883. \*\* Calculated as estimated number prescribed HCV treatment (555,883) x estimated percentage who achieved SVR (58.8%); n=326,859. Note: Only non-VA studies are included in the above HCV treatment cascade.

#### HIV

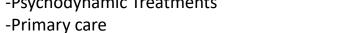
- 14,500 with injection drug use unaware of HIV Status
- Testing is not routine in opioid treatment programs
- Less likely to initiate antiretroviral therapy
- Less likely to achieve viral suppression
- Less likely to be retained in care

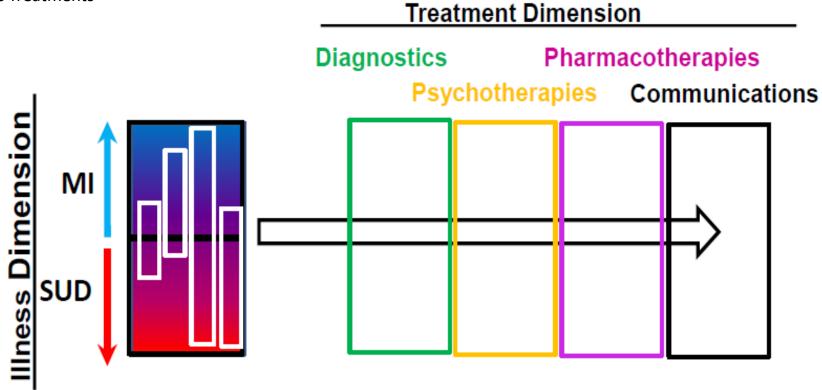
#### Management

- Integrated and comprehensive approach but individualized
- Avoid mis/over diagnosis during withdrawals or intoxication
- Emphasis treatment engagement and Therapeutic alliance

#### General principles of Management of Addictions in the Context of Addiction Psychiatry and the 2 x 4 Model

- -Integrated with Pharmacological Treatments for Mental illness
- -Integrated with Pharmacological treatment for Addiction
- -Psychodynamic Treatments





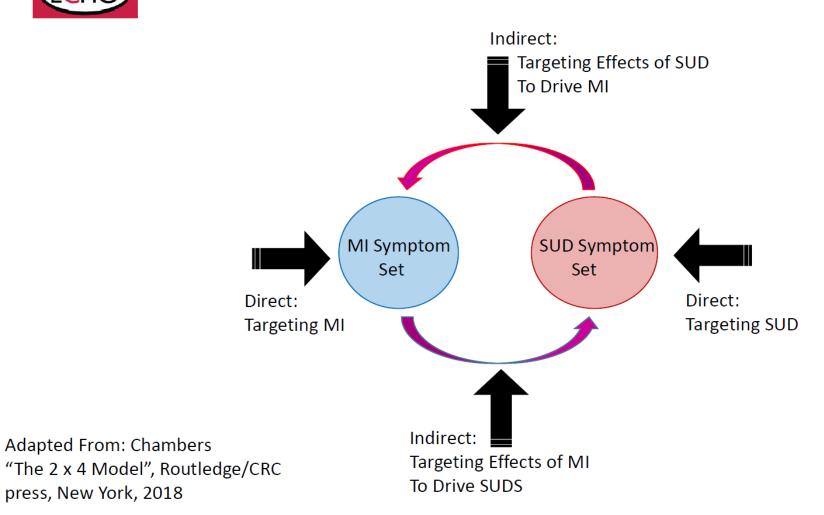
The 2 x 4 Model

Figure 15



press, New York, 2018

#### Points of Attack in 2 x 4 Model Treatment



#### **SUMMARY**

- Mental illness and SUD are interlinked with a bidirectional relationship
- Co-morbidities are the rule not the exception
- OUD causes severe medical and neuropsychiatric complications
- Key for treatment is Integrated mental/addiction health care with primary care involvement