# Severe Persistent Mental Illness and Ageing (with a touch of personality)

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2023 Toronto Geriatrics Update Course Friday November 10<sup>th</sup> 9:00 – 9:50 AM EST





#### **Conflicts**

**Grants**: CIHR

**Positions**: salary support from Sinai Health for role as Vice-President Medical Affairs; and from Provincial Geriatrics Leadership Ontario (PGLO) as Medical Director, Geriatric Psychiatry

**Industry**: have received stipend from Eli Lilly for talk on health care system planning

I will not be making specific medication recommendations in today's talk, and medications if discussed will refer to generic names.





#### **Objectives**

- Understand how major mental illness may present as we age
- Learn when and how to ask for help from your psychiatry colleagues
- Approach personality from a life course perspective, rather than from specific disorder approach
- Understand how trauma history is relevant in clinical presentations in ageing







#### Schizophrenia

- 2 or more of s/s in a month period (less if tx)
- (must include 1,2,or3)
  - 1.delusions 2. hallucination 3. disorganized speech
  - 4. disorg. Behaviour 5. negative symptoms

Sign disruption in major life fxn domains Continuous disturb of at least 6 mo





# **Bipolar Disorder (Type 1)**

Presence of mania for at least one week

Mania: (3 required, or 4 if mood irritable)
grandiosity, less sleep, speech pressure/rapis,
flight of ideas, distractibility, increase in activity, risk
taking

Impairment, not due to anything else

Majority of time in depression/euthymic





#### Thinking broadly about psychosis

A little like "chest pain" Eg of different models:

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Amphetamines ------ increase DA release Cocaine -----prevent DA reuptake LSD/ecstasy ------5HT1 receptor agonist PCP/ketamine -----impairs NMDA receptor
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leading to XS GLU in cleft





#### **Antipsychotic Medication**

- 1<sup>st</sup> and 2<sup>nd</sup> generation no difference in efficacy
- (CATIE, CUTLASS)
- Variation is SE profile
- For SCZ 10-20 % "good outcome", 50 % "poor outcome", 20-30 % "fail to respond" and half of these respond to clozapine
- Better for positive symptoms, less so for negative symptoms
- Blockade of D2 receptors in mesolimbic area
- Dosing around 3 mg haloperidol sufficient, clinical effect 65-70%, EPS 75 -80% blockade

(Kapur et al, Am J Psych, PET study 1st episode, Apr 2000)





# **Adverse effects Antipsychotics**

- Weight gain
- Dystonia
- Akathesia
- Parkinsonism
- Tardive Dyskinesia
- Hyperproloactinemia
- Neuroleptic Malignant Syndrome





#### **Anti-psychotics BPSD risk**

#### 1. Risk of death:

atypical antipsychotic 3.5% vs 2.5% placebo over a 12 week period

#### 2. Risk of stroke:

Odds ratio 9.9 in 1<sup>st</sup> week on typical/atypical Odds ratio 1 by 3<sup>rd</sup> month





#### **Treating Schizophrenia**

- Education, social support
- Medication: antipsychotic, ?clozapine
- Also focus on negative symptoms (difficult)

As age positive symptoms may wane somewhat, negative symptoms unchanged

15 – 20 year reduction in life expectancy





# **Bipolar disorder (Type 1) Treatment**

- Mania
- Emergency first focus on safety
- Medications in emergency, in maintenance
  - In emergency: benzo's, anti-psychotics, early introduction mood stabilizer – lithium, valproic acid
  - Maintenance: mood stabilizer





#### "mood stabilizer"

- Lithium ---- gold standard, but can be contra-indicated in elderly due to renal status
- Valproic acid
  - First recognized 1966, makes GABA system work better (ie. generally slows down the brain)
  - Liver metabolism
  - SE: nausea, wt gain, tremor (other less common)
  - Drug interactions: potentiates benzo, fluoxetine, TCA; \*\*\*lamotrigine
  - Does not interact with antipsychotic medication





# Ageing psychopharm (pharmokinetic)

**Absorption**: decrease surface area, decreased gut blood flow

**Distribution**: decreased water, increased fat, decreased muscle mass, decreased albumin

Metabolism: decreased hepatic mass/blood flow

**Excretion**: decreased renal blood flow, decreased GFR





### **Psychiatric Polypharmacy**

- ALL psychiatric drugs are designed specifically to cross the blood brain barrier
- All side effects are exacerbated by age
- Polypharmacy dangerous risk of motor effects, cog. effects, and "drug cascades"
  - Eg akathesia, trazodone, multiple antipsychotics





#### Major mental illness

- HISTORY
- Talk to family !!!!
- Escalation of symptoms
- Make a diagnosis
- Ask for help
- Use medication safely with clear understanding of indication, how follow response, and goal of treatment.
- SAFETY







# **Trauma Context Society (1)**

Trauma is common: 70-80 % of over 65 yrs will have experienced at least one traumatic event (1)

Violence against women is common: 25 % of women experience intimate partner violence; 10 % survive rape over a lifetime (2,3)

First Nations people have survived a residential school system, the Sixties Scoop, and disproportionate rates of incarceration (5 % of population, 30% of Federal penitentiary population) (4)





# **Trauma Context Society (2)**

Immigrant and refugee communities, racialized communities, and LGBTQ+ experience higher rates of physical violence and assault (5)

Health care system not account for, nor acknowledge, degree of trauma experienced by patients (6)



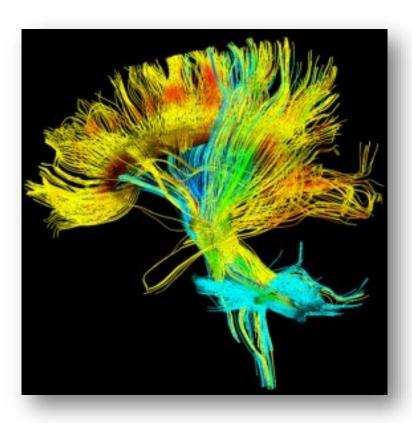




#### structure

# Frontal Lobe Thinking, Planning, Motor execution, Executive Functions, Mood Control Temporal Lobe language function and auditory perception and auditory perception integration of visual & somathspatial information Temporal Lobe language function and auditory perception and auditory perception integrated by Spatial processing memory and emotion Arriterior Cangulate Gyrus Volkional movement, attention, long-term memory, attention

#### connectivity



#### **Executive function**

**Planning** 

Organizing

Sequencing

Abstracting

"inner experience manager"







#### **Personality**

What are the "tasks" of personality?

**Emotional regulation** 

Coping with adversity

**Identity formation** 

Social relationships





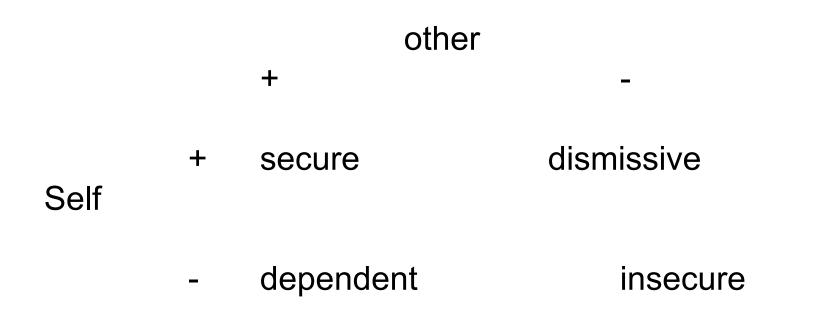
#### **Emotional life learned**

- Attachment theory
- "two-hit" model Winnicott
- Adult attachment styles
  - Self
  - Other





# Adult attachment styles (relationship)





We age the way we live

We die the way we age

#### Thank you

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Questions?



