A Layperson’s Guide to Understanding and Responding to Mental Illness
Course Outline

Class 1:  Introduction

Class 2:  The Brain and Mental Illness

Class 3:  Mental Illness Categories: Thought and Mood Disorders

Class 4:  Mental Illness Categories: Anxiety and Personality Disorders

Class 5:  The Panel

Class 6:  Crisis and The A.L.A.R.M. System Part I

Class 7:  The A.L.A.R.M. System Part II

Class 8:  Resources and Interacting with Mobile Crisis and Law Enforcement
Today’s Outline

I. The Brain:
   • the old understanding and the new understanding
   • how it works, what goes wrong and the consequences
   • the Frontal Lobe and the Limbic System

II. Mental Illness:
   • definitions
   • categories
   • mental illness vs. Dementia/Alzheimer’s Disease
Old vs. the New Understanding of the Brain

* Much of the following material is based on “CET: Physical Therapy for the Brain or Beyond Treatment as Usual”; PowerPoint by Ray Gonzalez, ACSW, LISW-S; The Center for Cognition and Recovery; Cleveland, Ohio; Ma7 19, 2016

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Old vs. the New Understanding of the Brain*

Concrete vs. Plastic

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Old Understanding of the Brain

- The brain does not change.
- Once a brain is damaged, it can not be fixed or improved.
- We have a fixed number of brain cells and synaptic connections.
New Understanding of the Brain

“Neuroplasticity”:

- the brain’s ability to re-organize itself through forming new neural connections or by adding cells.

- allows the neurons in the brain to adjust their activity and organization in response to new situations or to changes in the environment.

Although still controversial, many neurologists believe that our hippocampus, important for learning and memory, creates new brain cells during adulthood – up to 1400 a day
Old Understanding of the Brain

Treatment equals:

1. Symptom Control
2. Limited “Recovery”

1. Symptom control:
   a. Symptoms = major brain affliction:
      • mood afflictions
      • psychotic behaviors
      • anxiety extremes
      • personality maladaptions
   b. Control = reduction but rarely elimination of symptoms
      • medications
      • hospitalization
      • therapy
Old Understanding of the Brain

**Treatment equals:**

1. Symptom Control
2. Limited “Recovery”

2. Limited “Recovery”:
   a. Limited” = “socialization” is based on reduction of symptoms
      • Recovery Centers, Club Houses
      • Group Homes
      • Occupational Therapy
      • hospitalization – time limited
   b. Recovery = reduction of maladaptive behaviors

* I am not suggesting these things are bad; they are just limited
New Understanding of the Brain

Acute Symptoms with Secondary Symptoms

**Acute Symptoms:** (no cure)
- require medication
- may require hospitalization

**Secondary Symptoms:** (able to be repaired)
- impaired cognitive functioning
  - rigid thinking
  - disorganized thinking
  - and many other maladaptive thinking styles
- “desocialization”
  - isolation
  - poor or lack of perspective taking
  - limited understanding of Front Stage/Back Stage behavior
New Understanding of the Brain

**BUT...**

- suppose memory is impaired
- suppose thought processing is slow or impoverished
- suppose judgment is impaired or even missing
- suppose Social Cognition is impaired or missing

*Then what happens?...*
New Understanding of the Brain

If adults don’t “get it” people tend to walk away/avoid

• When people walk away/avoid
  ✓ socialization stops
  ✓ learning stops
  ✓ Social Cognition stops and strange behaviors grow
  ✓ And people become DESOCIALIZED

• When desocialization happens
  ✓ Dysfunctional roles are established
  ✓ Others (consciously or unconsciously) reinforce dysfunctional roles
  ✓ Social Cognition stops and strange behaviors grow
  ✓ Dysfunctional behavior becomes familiar if not comfortable
  ✓ Social Cognition is impaired or ended

Resocialization is the answer
New Understanding of the Brain

Examples of Resocialization

• **Cognitive Remediation**
  - The use of activities, especially computer-based exercises, to improve cognitive skills like focus, attention, memory, brain stamina and thought processing speed

• **Cognitive Enhancement Therapy – 54 week therapy program**
  - creates or strengthens synaptic connections
  - teaches and/or enhances “Social Cognition” by focusing on:
    - *impaired cognitive functioning*
      - rigid thinking
      - disorganized thinking
      - *and many other maladaptive thinking styles*
    - “desocialization”
      - isolation
      - poor or lack of perspective taking
      - limited understanding of Front Stage/Back Stage behavior
The Brain: *how it works and what goes wrong*
The Brain

**Frontal Lobe:** executive functions, thinking, planning, organizing, problem solving. Emotions and behavioral control and personality.

**Limbic System:** Behavioral and emotional responses; energizes the Frontal Lobe.

**Occipital Lobe:** vision.

**Cerebellum:** Balance coordination.

**Brain Stem:** Regulates basic body functions.

**Temporal Lobe:** memory, understanding, language.

**Parietal Lobe:** perception, making sense of the world, arithmetic, spelling.
The Brain

100 billion neurons

about 3 lbs.

Thousands of types on neurons
a. Newborn  
b. 1 month  
c. 3 months  
d. 6 months  
e. 15 months  
f. 24 months
Neurologists are now able to take detailed pictures of the brain.
A few more brain scans with poor “expectations” added below each scan by original poster.
Neurotransmitters are absorbed by receptors of the next cell...

...and sends the message on to the next cell

Like an electric charge, one neuron sends a message to another neuron...

...that fills the synapse - the gap between the cells

...and sends the message on to the next cell
what goes wrong?

schizophrenia
what goes wrong?
depression
The Brain: **Frontal Lobe and Limbic System***

*All of this and the following slides except where noted is adapted from the Cognitive Enhancement Therapy program (CET) social cognition talk: “The Frontal Lobe and Limbic System”*
Frontal Lobe and Limbic System

“Thinking about Thinking”
Higher Reasoning
Executive Function

Prefrontal Cortex
9 Functions of the Prefrontal Cortex
1. Empathy
2. Insight
3. Response Flexibility
4. Emotion Regulation
5. Body Regulation
6. Morality
7. Intuition
8. Attuned Communication
9. Fear Modulation

Limbic Brain
1. Fight, flight, freeze stress response
2. Thinks, "Am I safe? Do people want me?"
3. Emotions live here
Frontal Lobe and Limbic System

Frontal Lobe  “thinking”

Limbic System  “feeling”  “energy”

balance, balance, balance!
Frontal Lobe and Limbic System

Frontal Lobe
- thinking
  - informs, regulates, judgment

Limbic System
- feelings
  - energizes, motivates
Frontal Lobe and Limbic System

Frontal Lobe "thinking"

Limbic System "feeling" "energy"

balance, balance, balance!

Too much energy, not enough judgment = disinhibition, impulsivity
Frontal Lobe and Limbic System

Frontal Lobe “thinking”

Limbic System “feeling”

“energy”

balance, balance, balance!

*Little or no energy = lack of motivation, difficulty starting/completing tasks*
Frontal Lobe and Limbic System

Frontal Lobe

"thinking"

Judgment

Organization

Focus

etc.

The Frontal Lobe provides “the brakes” – focus, control, judgment, etc.

Limbic System

"feeling"

“energy”

The Limbic System “fuels” or energizes the Frontal Lobe providing motivation

Imagine a car with no brakes

Imagine a car with no gas
Frontal Lobe and Limbic System

**just thinking out loud:**

Q: at what age does the brain finish developing and maturing?

A: mid to late 20’s*

Q: at what age do people:
  - get a driver’s license
  - reach the age of consent
  - get drafted
  - become legally accountable
  - go away to college

A: 18

... hmmmmmmmmmm ...

*“The Teen Brain: 7 Things to Know;; www.nimh.nih.gov (National Institute of Mental Health)
The Frontal Lobe and Limbic System are the parts of the brain most affected by Mental Illness.
definitions and categories
How “psychosis” is betrayed...

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1. Mental Illness is a medical illness*

- malfunctioning organ of the body
- requires measurable symptoms
- responds to medication
- progressive and permanent
- genetic and hereditary

* I read an article a couple of years ago that made the argument that this is not quite accurate but most others still hold for this model.

Note: this is very important. The temptation may be to “diagnose” (intentionally or not) based on a little bit of information which is risky at best. (e.g. hearing voices; Kroger employee)
Mental Illness: definitions

2. Mental Illness is a collection of illnesses

- Listed in the Diagnostic and Statistical Manual (DSM-5)
- 300+ disorders divided into many categories including:
  - Mood disorders
  - Psychotic disorders
  - Anxiety disorders
  - Personality disorders
  - and many more
Mental Illness: definitions

3. Mental Illnesses fall on a continuum of intensity

Not every illness is the same in intensity, symptoms, course and recovery.
Not every person has the same:

- intensity,
- symptoms,
- course
- recovery

3. Mental Illnesses fall on a continuum of intensity
Mental Illness: categories

- Mood disorders  
  affect the way a person FEELS
- Thought (Psychotic) disorders  
  affect the way a person THINKS
- Personality disorders  
  affect the way a person RELATES
- Anxiety disorders  
  affect the way a person REACTS

thoughts, knowledge, insight, understanding, perception, organization, orientation, judgment, foresight, perspective, taking
Special Populations: categories

- Dementia (Alzheimer’s Disease)
  affects a person’s ORIENTATION and MEMORY

- Autistic Spectrum Disorder
  affects a person’s COMMUNICATION and SENSORY RESPONSE

- Intellectual Disability (mental retardation)
  affects a person’s INTELLECTUAL ABILITY
Healthy Brain vs. Mental Illness vs. Dementia

Mental Illness = brain malfunction  Dementia = brain damage
Healthy brain vs. Dementia

Look at what’s missing

Recall: Change Expectations - the brain can’t do what it can’t do
Alzheimer’s Disease: some information

- Dementia is the category; Alzheimer’s is the most common
- 5.8 million Americans have Alzheimer’s Disease
- An estimated 800,000 individuals with Alzheimer’s (or one in seven) live alone.
- By 2025, the number of people age 65 and older with Alzheimer’s disease is estimated to reach 6.7 million
- 60% of homes with someone with Alzheimer’s has ______ _______ ?

Autistic Spectrum Disorder: information

- Autism now Autistic Spectrum Disorder (ASD). Why?
- No two people with autism are alike. It impacts each individual in a unique way
- No known cause or cure but treatment is possible
- Not more; more understanding (wider umbrella)
- Mac vs. PC: ASD brain vs. “normal” brain;
- not “disabled brain” but “differently abled brain”
Coming attractions...

- **Mood Disorders including:**
  - Depression
  - Bipolar Disorder
  - Suicide

- **Thought Disorders including:**
  - Schizophrenia
Remember: the only dumb question...

...is the one you don’t ask