

# Modern Day Depression & Anxiety: Examining Social Media's Influence on a Diagnosis



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# Disclosures

Speaker's Bureau: Janssen pharmaceuticals  
Not relevant to this presentation.

# Objectives

- ▶ Depression and anxiety statistics and criteria
- ▶ Understand the role of social media
- ▶ Treatment and management

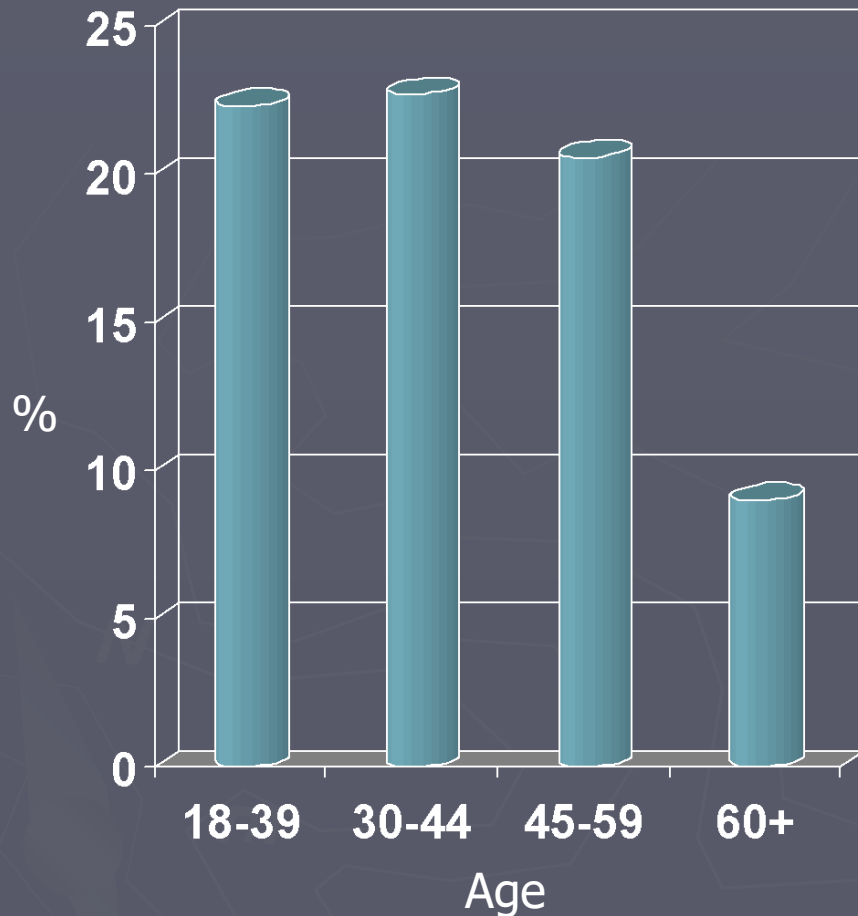
# Statistics

## ▶ Major Depression

- 21 million adults had at least one depressive episode in 2020 (8.4% of all US adults)
- Females 10.5%, Males 6.2%
- Median age of onset is 32.5 years old

# Statistics

- ▶ Anxiety is the most common mental health illness in the United States
  - 40 million adults
  - Approximately 19.1% of the population had an anxiety disorder last year
  - Approximately 31% experience an anxiety disorder in their lifetime



► The NIMH reports that the incidence of anxiety disorders varies by age:

- 18-39: 22.3%
- 30-44: 22.7%
- 45-59: 20.6 %
- 60+: 9%

# Major Depressive Disorder

## Diagnostic Criteria

- 5+ Sx present in same 2 week period and change from previous functioning; one must be depressed mood or loss of interest
  - Depressed mood most of the day, nearly every day
  - Markedly diminished interest or pleasure in activities
  - Significant weight loss, or increase or decrease in appetite
  - Insomnia or hypersomnia

# Major Depressive Disorder

## Diagnostic Criteria

- Psychomotor agitation
- Fatigue or loss of energy
- Feelings of worthlessness, or excessive or inappropriate guilt
- Diminished ability of think or concentrate, or indecisiveness
- Recurrent thoughts of death, SI



# Major Depressive Disorder Diagnostic Criteria

- Symptoms cause clinically significant distress or impairment in social, occupational, or other areas of functioning
- The episode is not attributable to the physiological effects of a substance or to another medical condition

# Differential Diagnosis

- ▶ Generalized Anxiety Disorder: 2.7%
- ▶ Panic Disorder: 2.7%
- ▶ Social Anxiety Disorder: 7.1%
- ▶ Obsessive-Compulsive Disorder: 1.2 %
- ▶ Phobias: 9.1% most common\*
- ▶ Post-Traumatic Stress Disorder: 3.6%

- ▶ Anxiety is a symptom & a diagnosis
- ▶ What most people refer to as anxiety is Generalized Anxiety Disorder



# Generalized Anxiety Disorder

## Diagnostic Criteria

- A. Excessive anxiety & worry (apprehensive expectation) occurring more days than not for at least 6 months, about a number of events or activities (such as work or school)
- B. The individual finds it difficult to control the worry
- C. The anxiety & worry are associated with 3 or more of the following 6 symptoms:

1. Restlessness or feeling keyed up or on edge
2. Being easily fatigued
3. Difficulty concentrating or mind going blank
4. Irritability
5. Muscle tension
6. Sleep disturbance (difficulty falling or staying asleep, restless, unsatisfying sleep)

\* Only one required in children

- D. The anxiety, worry, or physical symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning
- E. The disturbance is not attributable to the physiological effects of a substance or another medical condition
- F. The disturbance is not better explained by another mental disorder

# But what does it look like?

- doing small unimportant things to distract
  - constantly checking the phone/social media
  - feeling the need to do something, but doing something other than task at hand
- smoking
- mindless snacking
- chewing or picking at skin, nails, hair
- “nagging” close ones
- working during off-hours
- “perfect” appearance

# Case Study

Tina is a 23 year old female with a full-time, work-from-home job and supportive social structure. She reports feeling overwhelmed and “anxious all the time.” She is complaining of poor sleep, low appetite yet weight gain, easily irritable with her boyfriend and feels guilty for minor things. She spends most of her down time, laying on the couch, scrolling Instagram because she is too tired and it relaxes her. Upon further questioning, she admits to feeling sad most days. She is asking for a medical workup because “something is wrong, the anxiety is out of control even though everything is going well.”

What is the differential diagnosis?





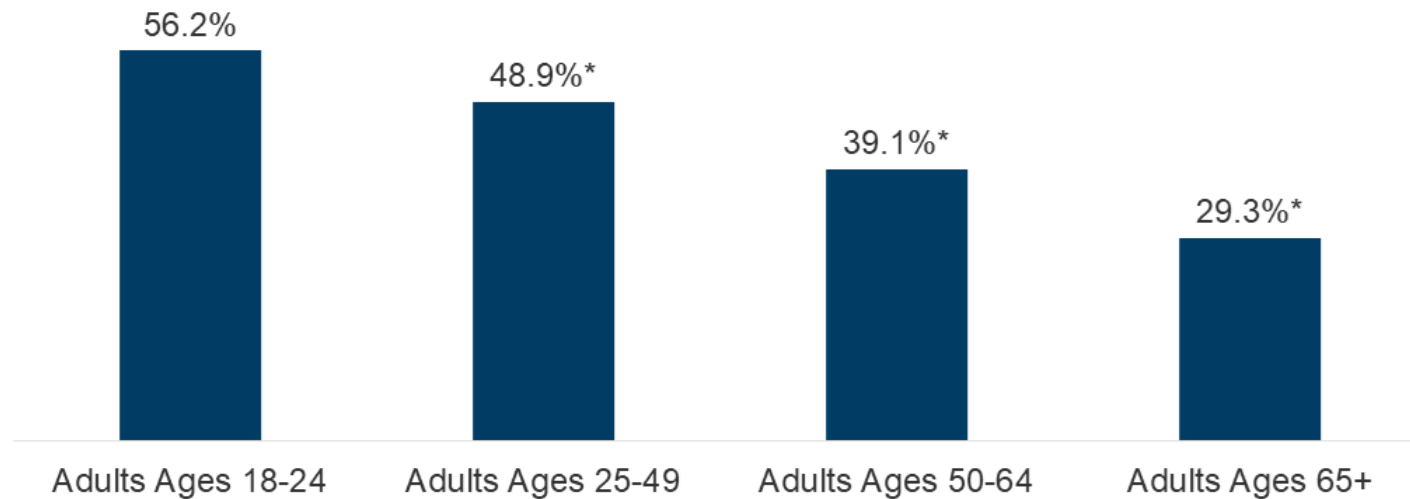
# Practical Facts

- ▶ MDD is the leading cause of disability in the US for ages 15 to 44.3
- ▶ GAD accounts for 110 million disability days per year in the US population



Figure 3

## Share of Adults Reporting Symptoms of Anxiety and/or Depressive Disorder During the COVID-19 Pandemic, by Age



NOTES: \*Indicates a statistically significant difference between adults ages 18-24. Data shown includes adults, ages 18+, with symptoms of anxiety and/or depressive disorder that generally occur more than half the days or nearly every day. Data shown is for December 9 – 21, 2020.

SOURCE: U.S. Census Bureau, Household Pulse Survey, 2020.



# Increase since the Pandemic

- ▶ US adults reporting symptoms of anxiety and depression
  - 2019: 11%
  - 2020: 41%
  - ▶ **56% young adults 18-24**

# Increase in those with underlying mental illness

- ▶ 63% of people with depression/and or anxiety reported having worse or much worse symptoms since the start of the Pandemic
- ▶ Refills of anxiolytics increased 35%
- ▶ Substance abuse increased about 20%; alcohol moreso
- ▶ Rates dropped with lifting of stay at home orders

# During late June, 40% of U.S. adults reported struggling with mental health or substance use\*

## ANXIETY/DEPRESSION SYMPTOMS



## STARTED OR INCREASED SUBSTANCE USE



## TRAUMA/STRESSOR-RELATED DISORDER SYMPTOMS



## SERIOUSLY CONSIDERED SUICIDE†



\*Based on a survey of U.S. adults aged ≥18 years during June 24-30, 2020

†In the 30 days prior to survey

For stress and coping strategies: [bit.ly/dailylifecoping](https://bit.ly/dailylifecoping)

- At first we thought the uptick in anxiety was simply due to the fear of Covid
- Young adults are facing challenges that were pushed forward and discussed, mainly via social media
  - ◆ debt, job insecurity
  - ◆ inability to financially start and support a family
  - ◆ political and social unrest
  - ◆ unsustainable futures

# Role of Social Media

- ❑ Replaces genuine human interaction
- ❑ Fragmented reality
- ❑ Selective information distorts messages
- ❑ Comparisons to others, devalues
- ❑ Increased spending the last 2 years, influenced to make empty purchases
- ❑ Phantom phone
- ❑ Hyper-social environments

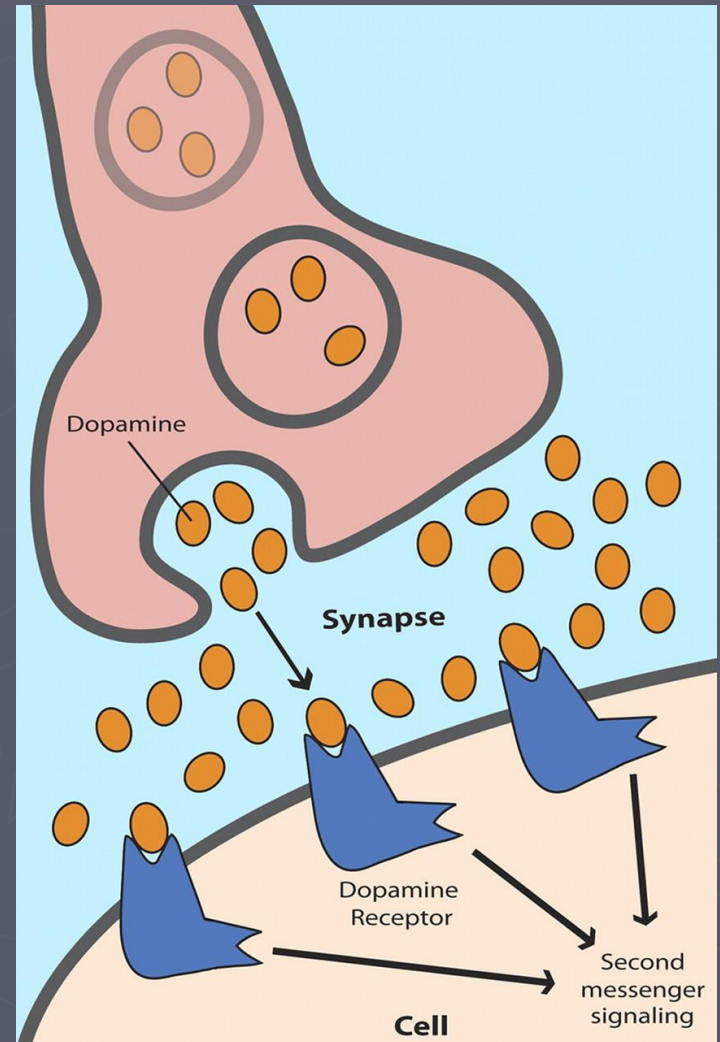
# Social Media

- ▶ Dopamine
  - Brain receives a “reward” /positive reinforcement
  - quick and easy fix
- ▶ Infinite access & socially acceptable
- ▶ Mimics human connection
- ▶ Easy to consume/distract for those who are anxious or depressed within minimal concentration



# Dopamine

- ▶ Dopamine is the feel good neurotransmitter
- ▶ Interacts with the pleasure & reward center of the brain
- ▶ Instant gratification
- ▶ Imbalance leads to anxiety & depression



# What can be done?

- Mindfulness
  - Doesn't have to be fancy or intimidating
- Log, take account
  - which activities are being avoided, which are being overused
- Limit exposure

## ► How to control the exposure?

- Varies per individual
- Restrictions & boundaries
- Checks & balances: timers, accountability partners



# Treatment modalities

- ▶ Therapy
- ▶ Mindfulness
- ▶ Exercise
- ▶ Medication



# Anxiety Management

- ▶ Relaxation training: control anxiety through systematic relaxation of the major muscle groups
- ▶ Breathing retraining: slow, abdominal breathing to relax and/or avoid hyperventilation
- ▶ Positive thinking and self-talk: replace negative thoughts “I’m going to lose control” with positive thoughts “I did it before and I can do it again” when anticipating or confronting stressors

- ▶ Assertiveness training: teaching how to express wishes, opinions and emotions appropriately & without alienating others
- ▶ Thought stopping: distraction techniques to overcome distressing thoughts by inwardly stopping



# Lifestyle Modification

- ▶ Sleep hygiene
- ▶ Balanced diet without processed sugar
  - ▶ Cut out caffeine, alcohol
- ▶ Limit setting, routine, structure
  - ▶ Set boundaries for work; especially work from home, self employed
- ▶ Set boundaries for social media and screen time exposure

# Medication

- Selective serotonin reuptake inhibitors (SSRI)
- Serotonin-noradrenaline reuptake inhibitors (SNRI)
- Noradrenaline & specific serotonergic antidepressants (NASSA)
- Tricyclic antidepressants (TCA)
- Serotonin antagonists and reuptake inhibitors (SARI)
- Monoamine Oxidase Inhibitors (MAOI)



# Medication

- Benzodiazepines
- Hydroxyzine
- Buspirone
- Hydroxyzine
- Propranolol
- Gabapentin\*
- Pregabalin\*
- Antipsychotics, mood stabilizers, muscle relaxers

\*off-label

# SSRIs

- ▶ Antidepressants taken daily
- ▶ Takes longer to help with anxiety than it does depression, 8-10 weeks minimum
- ▶ Results are gradual, but effective
- ▶ Bupropion (Wellbutrin) does not cover anxiety (popular antidepressant but not an SSRI)
- ▶ Fluoxetine (Prozac), venlafaxine (Effexor), great first choices

# Benzodiazepines

- ▶ Patients love benzodiazepines. This is what they will ask for because it works. Most patients are NOT abusers, they just want something to work quickly.
  - Equivalent of a band aid, not the solution
- ▶ Lorazepam (Ativan)-most commonly prescribed in healthcare settings. Long half-life, PO & IM form
- ▶ Alprazolam (Xanax) most asked for in outpatient settings. Works quickly, wears off quickly.
- ▶ Controlled substance Schedule III

# CURES Program

- ▶ California's prescription drug monitoring program
- ▶ Acronym for Controlled Substance Utilization Review and Evaluation System
- ▶ Database of Schedule II, III and IV controlled substance prescriptions dispensed in California
- ▶ Requires all California licensed prescribers authorized to prescribe scheduled drugs to register for access to CURES 2.0

[oag.ca.gov/cures](https://oag.ca.gov/cures)

# Buspirone

- ▶ Buspirone (Buspar) FDA approved specific indication for anxiety
- ▶ Not controlled or addictive
- ▶ Relatively safe to take, low med-med interactions
- ▶ Take daily, not a PRN



# Hydroxyzine

- ▶ Hydroxyzine (Vistaril) is an antihistamine found effective to cover anxiety
- ▶ Also helps with sleep if given at bedtime
- ▶ Non-addictive, also good for patients with drug abuse history or alcohol dependence
- ▶ Can be taken as a PRN like benzodiazepines

# Gabapentin

- Neurontin
- A neurological medication used for seizures or neuropathic pain
  - enhances transmission of GABA
- Multiple indications; found to cover anxiety
- Off-label=not an FDA-approved indication
- Good for patients with drug abuse history
- TID dosing

# Propranolol

- Inderal
- Indicated for heart conditions or high blood pressure
- Block the effects of stress hormones (adrenaline)
- Off-label
- Reduces physical symptoms therefore good for public speaking or students taking tests



# Pregabalin

- Lyrica
- Indicated for partial seizures
- Off-label
- Lowers anxiety by reducing the release of excitatory neurotransmitters (glutamate)
- Good for somatic complaints

# Proper Medication Management

- ▶ Important to have these medications prescribed by a clinician comfortable with managing the medication, as well as symptoms of anxiety
- ▶ Primary care providers, psychiatrists, neurologists
- ▶ Note, increased risk of suicide in young adults and other black box warnings with certain medications, including SSRIs
- ▶ CURES registry not to be ignored for controlled substances, even when prescribing to peers

# Case Study Round-Up

Tina disagreed with the Major Depressive Disorder Diagnosis but agreed to start citalopram (Celexa.) She deleted all social media apps off of her phone and only looked at those accounts on her computer on weekends. Her energy lifted within the first two weeks but 2 months later she still complained of anxiety.

What is the next step for Tina?

# Questions?



Thank you!