Clinical Depression and COVID-19: Expanding on Mental Health Promotion

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Outline

• Basic primer on depression and risk factors
• What is happening right now
• Looking forward: Best practices
Basic primer on depression and risk factors
What causes depression?

Heritability of depression:

- Genetics: 40%
- Environment: 60%
What causes depression?

- Negative life experiences
- Context of adolescence (women)
- Trauma, violence
- Unemployment, homelessness
- Physical/medical conditions
- Accumulation of daily stressors
- Disruptive “positive” events
- Pregnancy, childbirth (women)
- Marriage (women)
- Poor social support, marital dissatisfaction
- Divorce, widowhood, death of loved ones
- Separation from family

Environment 60%
MDD – Melancholic

Recurent Brief Depressive Disorder

Minor Depressive Disorder

Depressive PD

MDD – Atypical

MDD – Catatonic

Dysthymic Disorder
Core experience: Feeling sad, down, blue

An extension or dysregulation of a normal, adaptive emotional experience

Great variability in time course, severity, and correlated symptoms.
Diathesis-Stress Model of Depression

Environmental stress

Genetic predisposition
COVID-19: A perfect storm of environmental stressors

Stress

Financial

Loss

Social

COVID-19: A perfect storm of environmental stressors

Acute and chronic stress:

- Hyperactivity of the stress-response system (HPA-axis): One of most consistent findings in biological psychiatry of depression.
- Pay attention to increased cortisol in morning.
- Anxiety and trauma typical precede and predict depression.
COVID-19: A perfect storm of environmental stressors

Personal trauma, loss and grief:

- 1 in 1850 Black Americans have died of COVID-19
- 1 in 4400 White Americans have died of COVID-19
  -- May 27, https://www.apmresearchlab.org/covid/deaths-by-race
- Disrupted and complicated grief responses
- Front-line health care workers
COVID-19: A perfect storm of environmental stressors

Social difficulties:

• Social distancing and loneliness?
• Frustration, boredom, lack of access to rewarding experiences and social contact
• Family conflict: Divorces rates up in China
COVID-19: A perfect storm of environmental stressors

Financial difficulties:

- 2008 stock market crash: Wealthy experienced large wealth losses, increase in anti-depressant prescriptions, but not increase in depression.
  -- https://ajph.aphapublications.org/doi/10.2105/AJPH.2013.301566

- Feb-March, 2020: 34.1% increase in anti-anxiety and 19% increase in anti-depressant prescriptions. Rates had been declining. 78% new prescriptions.
COVID-19: A perfect storm of environmental stressors

Financial difficulties:

*Unemployment per se does not predict depression.*

- **Home foreclosures** in 2008 recession: 62% increase in depression.  
  [https://ajph.aphapublications.org/doi/10.2105/AJPH.2013.301566](https://ajph.aphapublications.org/doi/10.2105/AJPH.2013.301566)

- **Material hardship:**
  - Financial strain: OR = 1.47
  - Financial deprivation: OR = 1.19

- **Ceasing to live with partner:** OR = 2.06
  [https://doi.org/10.1192/bjp.bp.105.020040](https://doi.org/10.1192/bjp.bp.105.020040)
What is happening right now
Health care workers in China during initial outbreak

Sx of depression: 50%

Increased risk:
• Women (OR: 1.94)
• Intermediate title, i.e., nurses (OR: 1.77)
• Front-line (OR: 1.52)

Lower risk:
• Outside Wuhan (OR: 0.77)
Typically we expect 2:1 ratio for women:men
Typically we would expect highest levels of depression in middle-age groups, not younger groups.
Typically, Latinos and Blacks show higher rates of symptoms but not higher rates of disorder.

For Latinos, disorder is predicted by length of time in the U.S.

CDC/Census Bureau “Household Pulse Survey”: May 14-19, 2020
[https://www.cdc.gov/nchs/covid19/pulse/mental-health.htm](https://www.cdc.gov/nchs/covid19/pulse/mental-health.htm)
Percent with Symptoms of Depression by State

CDC/Census Bureau “Household Pulse Survey”: May 14-19, 2020
https://www.cdc.gov/nchs/covid19/pulse/mental-health.htm
Percent with *Symptoms* of Depression

*Caution comparing these numbers to actual diagnoses; rates of clinical diagnoses will be lower:*

*Functional impairment?*

*One week versus two weeks?*
Associations with depression?  (N = 720; April, 2020; national sample)
Projected Suicides

• 1% increase in unemployment rate = 1.6% increase in yearly suicide rate

• Nationally = 775 additional suicides per 1% increase

• 20% increase in unemployment = 18,000 suicides

Projected deaths of despair? Suicide, drugs, alcohol

Table. Possible Additional Deaths of COVID-19 Recession on Deaths of Despair, Alternative Scenarios

<table>
<thead>
<tr>
<th>Percent Change in Mortality with One Point Increase in Unemployment</th>
<th>Slow</th>
<th>Medium</th>
<th>Fast</th>
<th>Slow</th>
<th>Medium</th>
<th>Fast</th>
<th>Slow</th>
<th>Medium</th>
<th>Fast</th>
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</thead>
<tbody>
<tr>
<td>1% increase</td>
<td>1.3% increase</td>
<td>1.6% increase</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2020</td>
<td>9,859</td>
<td>9,333</td>
<td>8,343</td>
<td>12,817</td>
<td>12,133</td>
<td>10,846</td>
<td>15,774</td>
<td>14,932</td>
<td>13,349</td>
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<tr>
<td>2021</td>
<td>18,347</td>
<td>16,103</td>
<td>12,209</td>
<td>23,851</td>
<td>20,934</td>
<td>15,871</td>
<td>29,355</td>
<td>25,765</td>
<td>19,534</td>
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<tr>
<td>2022</td>
<td>15,879</td>
<td>11,840</td>
<td>5,832</td>
<td>20,642</td>
<td>15,392</td>
<td>7,581</td>
<td>25,406</td>
<td>18,944</td>
<td>9,331</td>
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<tr>
<td>2023</td>
<td>13,410</td>
<td>8,025</td>
<td>1,261</td>
<td>17,434</td>
<td>10,433</td>
<td>1,639</td>
<td>21,457</td>
<td>12,841</td>
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<td>2024</td>
<td>10,394</td>
<td>3,973</td>
<td>-</td>
<td>13,512</td>
<td>5,164</td>
<td>-</td>
<td>16,630</td>
<td>6,356</td>
<td>-</td>
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<tr>
<td>2025</td>
<td>7,651</td>
<td>870</td>
<td>-</td>
<td>9,947</td>
<td>1,131</td>
<td>-</td>
<td>12,242</td>
<td>1,392</td>
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<tr>
<td>2026</td>
<td>7,103</td>
<td>316</td>
<td>-</td>
<td>9,234</td>
<td>411</td>
<td>-</td>
<td>11,365</td>
<td>506</td>
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<tr>
<td>2027</td>
<td>5,732</td>
<td>-</td>
<td>-</td>
<td>7,451</td>
<td>-</td>
<td>-</td>
<td>9,171</td>
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<tr>
<td>2028</td>
<td>4,086</td>
<td>-</td>
<td>-</td>
<td>5,312</td>
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<td>-</td>
<td>6,538</td>
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<tr>
<td>2029</td>
<td>3,812</td>
<td>-</td>
<td>-</td>
<td>4,956</td>
<td>-</td>
<td>-</td>
<td>6,099</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>96,273</td>
<td>50,460</td>
<td>27,644</td>
<td>125,155</td>
<td>65,598</td>
<td>35,937</td>
<td>154,037</td>
<td>80,735</td>
<td>44,230</td>
</tr>
</tbody>
</table>

Types of Recovery: Slow—Same as Great Recession; Medium—Twice as Fast; Fast—Four Times as fast.

Medium assumptions: 65,598 added deaths

The thing about projections...
Looking Forward: Best Practices

How we talk about depression matters:

“Character” talk?

“Biology” talk:
• Decreases stigma and blame
• Decreases most forms of help-seeking except anti-depressants
• Increases punitive behavior from others.

“Environment” talk:
• Decreases stigma and blame
• Increases help seeking and talking to others
• Fits how many minority groups conceptualize depression
Looking Forward: Best Practices

What science tells us about prevention programs?

- Multi-component depression programs decrease depression rates by 11%
- Simple “behavioral” pleasant events scheduling not effective
- Most effective: Coping skills
- Simple social support groups: Only effective for older adults

Looking Forward: Best Practices

Keep in mind the risk factors:
• Target stress, trauma, financial strain, social difficulties
• Teach mindfulness
• Promote exercise and healthy lifestyle options
• Increase coordination and connection to primary care
• Increase telehealth
Looking Forward: Best Practices

Specific groups to reach out to:

- Front line health-care workers
- Those who have experienced direct loss
- Those hit harder by financial crisis
- Those living alone or who have changed living situation
Looking Forward: Best Practices

Increase group treatment (including telehealth formats):

Consider Behavioral Activation:

• Easier to train and implement as other treatments
• Effective
• Cross-culturally acceptable

Individual Strategies

- Validation and normalizing
- Hope
- Flexibility
- Mindfulness and acceptance
- Connect with values
- Engage in values-consistent actions

- The goal is not necessarily to feel better; the goal is to keep striving
Thank you. Questions?

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