Disclosures

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- National Palliative Care Research Center

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- Humana Inc: Contracted research
- Papa Health: Consulting fees
Outline

1. How is the pandemic a stressor?
2. What populations have been disproportionately at risk?
3. How can we incorporate length of time of the pandemic into our model of a stressor?
4. What are available data sources?
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Just What Older People Didn’t Need: More Isolation

The coronavirus pandemic could sharpen the health risks of loneliness. But there are ways to connect.

Paula Span, New York Times 4-13-2020
Frequent feelings of loneliness: 29%

How have your feelings of loneliness changed due to COVID-19?
- Worse: 54%
- Same or Better: 46%

A. Recovery Phenotype

Stressor

Variable Score

Baseline 2 months 6 months 12 months

\( T_P \) \( A \) \( T_S \) \( S \) \( P \)
Loneliness **decreased** in the early months since shelter-in-place.

Subgroup with worsened loneliness.
Three general patterns

1. Loneliness Increases

Three general patterns

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“Before the virus I was socializing and seeing people a lot, but I feel a lot more lonely and isolated.” Follow-up: “I love technology, but have had trouble keeping up. Technology is something I feel comfortable with, but totally out of date.”

64 year old Female #88
Technology concerns

Three general patterns

1. Loneliness Increases
2. Remains High

Three general patterns

1. Loneliness Increases

2. Remains High

“I’m so used to not doing anything. This has been terrible.”
Follow-up#1: This has been the hardest thing I’ve had to do in my entire life. The isolation has made my mental and physical health worse.
Follow-up#2: The longer the coronavirus situation, the more on edge people are.

66 year old Female [#18]
Emotional coping

Three general patterns

1. Loneliness increases
2. Remains high
3. Loneliness is mild

Three general patterns

1. Loneliness increases
2. Remains high
3. Loneliness is mild

“I’m in my assisted living facility. I’ve been a little isolated and we’re confined so we’re safe, but life’s pretty dull.”

81 year old Male [#67]

Boredom

Key Considerations

1. We need multidimensional measures of collective stressors, and mixed-methods can elucidate mechanisms
   - **Psychological health**: depression, anxiety, PTSD
   - **Social health**: Multi-dimensional social isolation scales, loneliness (sub-clinical), social support
   - **Disrupted health behaviors**: substance use, physical activity, screen time, preventive health
   - **Technology use**
Outline

1. How is the pandemic as a stressor?
2. **What populations have been disproportionately at risk?**
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Nursing Home Settings

- Worsened mood and increased psychotropic medication use
- Physical effects including weight loss and loss of function
- Feelings of guilt, fear, and worry among family members
- Increased staff workload, stress, and burnout

"I miss my family and I’m very lonely and depressed."
"I miss hugs and touch, especially from my family members!"
"I have no cognitive impairments. However, there is the isolation, loneliness, not seeing my spouse for over 100 days. My spouse was usually here two times a day."
"Covid-19 has limited my visits with my son; there is no hope."

Proportion of Community-Dwelling Older Homebound Adults Aged 70 Years or Older, 2011-2020

Stay-at-home patterns by Census region.
Key Considerations

1. We need multidimensional measures of collective stressors, and mixed-methods can elucidate mechanisms.

2. We should consider varied living situations and different communities nationally and globally:
   - **Long-term care**: Nursing home, Assisted Living Facility
   - **Home**: Independent at home, Home with Help, Homebound, Homeless
   - **Hospitalized**: acute care, intensive care
   - **National and Global differences**:
     - Regional differences in public health restrictions
     - Racially and ethnically minoritized communities
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Trajectories of loneliness over 18 months of the pandemic

Four identified groups:
1) Persistently Lonely (16%)
2) Adapted to restrictions (22%)
3) Occasional loneliness (29%)
4) Never Lonely (33%)

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At risk of persistent loneliness:
- Poverty
- Living Alone
- Social isolation (technology)
- Anxiety or Depression

Key Considerations

1. We need multi-dimensional measures and mixed-methods

2. We should consider varied living situations and different communities nationally and globally

3. Consider the pandemic as both an acute and long-term stressor
   - Recurrent Stressors: Lock-downs, Public health measures
   - Variable impact of stressor: e.g. 2021 winter surge vs Omicron
   - Before, during, and “after” the pandemic
   - Ideally multiple time points during the pandemic
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Data and Analytic Approaches

Data:
- Omnibus national health surveys
  - Health and Retirement Study; National Health and Aging Trends Study
  - Baltimore Longitudinal Study of Aging; National Social life Health and Aging Project; SHARE;
    - Limitation: “During pandemic” time points – opportunity for sub-studies
- Hospital and administrative data
- Wearable devices, location sensors (Life Space Mobility)

Methods:
- Interrupted time series, latent class trajectory analysis, instrumental variable
- Qualitative and Mixed-methods

In Summary

1. The pandemic is a complex stressor.

2. We should consider multi-dimensional measurements of psychosocial stress and taking into account context and time.

3. There is available data which can capture trajectories which, combined with modern epidemiologic approaches and mixed-methods, can provide robust evidence.
Thank You!

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