



# Persistent Loneliness due to COVID-19 over 18 Months of the Pandemic: A Prospective Cohort Study

Ashwin Kotwal, MD, Stephanie Batio, MS, Michael Wolf, PhD, Kenneth E. Covinsky, MD Julia Yoshino Benavente, MPH, Carla Perissinotto, MD, Rachel M. O'Conor, PhD

### **INTRO**

- Loneliness was common early in the COVID-19 pandemic due to physical distancing measures, but little is known about how loneliness persisted into later stages of the pandemic.
- Persistent loneliness is strongly linked to short- and long-term physical and mental health outcomes
- Objective: Characterize trajectories of loneliness over 18 months of the pandemic

## **METHODS**

## Sample

 641 English- and Spanish-speaking adults diagnosed with ≥1 chronic condition (Range: 23-91 years old)



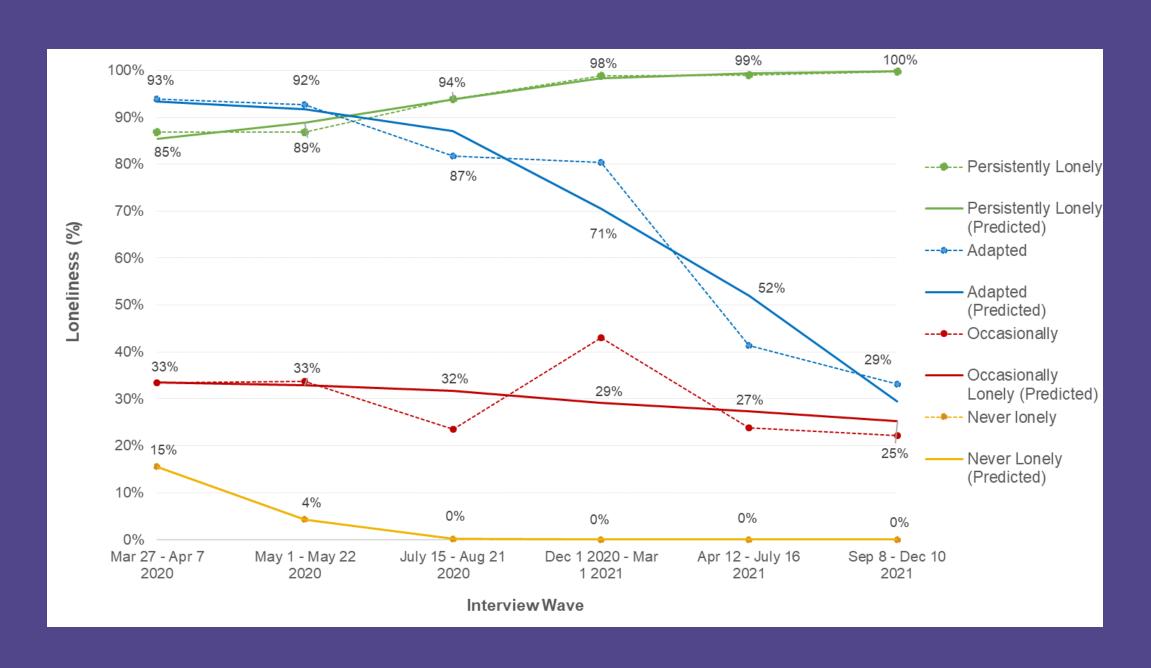
#### Procedure

- 7 telephone interviews between March 27, 2020 December 10, 2021
  - Response rate: 86%
  - Wave 7 retention: 74%
- Loneliness: "Over the past week, how often have you felt alone or lonely because of the coronavirus"
- Analysis:
  - Trajectory mixture models to identify clusters of individuals following similar trajectories of loneliness
  - Multiple regression to identify subgroups at highest risk of "persistent loneliness"

Over 18 months of the COVID-19 pandemic,

1 in 6 older adults experienced persistent

loneliness. Pre-COVID symptoms of
anxiety and depression were closely related
to the risk of persistent loneliness, as was
living alone, living below the poverty line,
and/or identifying as Hispanic/Latinx.



Tag us in your tweet! @AshwinKotwalMD; @RachelOConor; @NUCAHRA; @geri\_doc #AGS22 #loneliness #geriatrics



#### RESULTS

- Overall rates of loneliness declined (p=0.01):
  - March to April/2020: 51% lonely
  - September to December/2021: 31% lonely
- Four identified trajectories of loneliness:
  - 1) Persistently Lonely (16%)
  - 2) Adapted (22%)
  - 3) Occasional loneliness (29%)
  - 4) Never Lonely (33%)
- Subgroups at highest risk of persistent loneliness included those identifying as Hispanic/Latinx, living below the poverty line, living alone, and with pre-COVID depressive or anxiety symptoms.

	Other groups Persistently Lonely			Persistently Lonely throughout Pandemic		
	(n=541) %	(n=101) %	P Value	OR	95% CI	P Value
Age, mean (SD)	62.8 (11.1)	62.9 (10.1)	0.94	1.0	0.98 – 1.0	0.68
Female Gender	60.4	64.4	0.46	1.1	0.6 – 1.8	0.81
Race/Ethnicity			<0.001			
Black	31.7	22.2		0.7	0.3 – 1.3	0.20
Hispanic/Latinx	17.2	36.4		2.5	1.4 – 4.6	0.01
Other	2.8	3.0		1.5	0.3 – 6.1	0.61
White	48.3	38.4				
Below Poverty Level	25.9	44.6	<0.001	2.5	1.4 – 4.6	0.003
≥3 Chronic Conditions	63.2	56.4	0.20	1.4	0.8 – 2.6	0.22
Socially Isolated	31.1	39.8	0.32	1.3	0.8 – 2.1	0.33
Live Alone	31.1	44.6	0.01	1.6	0.9 – 2.6	0.06
Vaccinated	91.8	91.9	0.96	1.2	0.5 - 3.3	0.69
Depressive Symptoms, pre COVID, mean (SD)	51.4 (8.9)	55.1 (8.7)	0.002			
Anxiety Symptoms, pre COVID, mean (SD)	53.5 (7.5)	59.6 (8.1)	<0.001			

## **CONCLUSIONS**

- Overall rates of loneliness declined, but persistent loneliness was common, particularly among identified subgroups.
- Interventions addressing loneliness can ease pandemicrelated suffering, and may mitigate long-term mental and physical health consequences.

#### FINANCIAL DISCLOSURES

This research was supported by a grant from the National Institute on Aging (R01AG030611-S1) and Claude D Pepper Older American Independence Center Coordinating Center Multi Center Collaborative grant (U24AG059693; P30AG044281; P30AG059988). Dr. Ashwin Kotwal's effort on this project was supported by grants from the National Institute on Aging (K23AG065438; R03AG064323). Dr. O'Conor is supported by a training grant from the National Institute on Aging (K01AG070107).