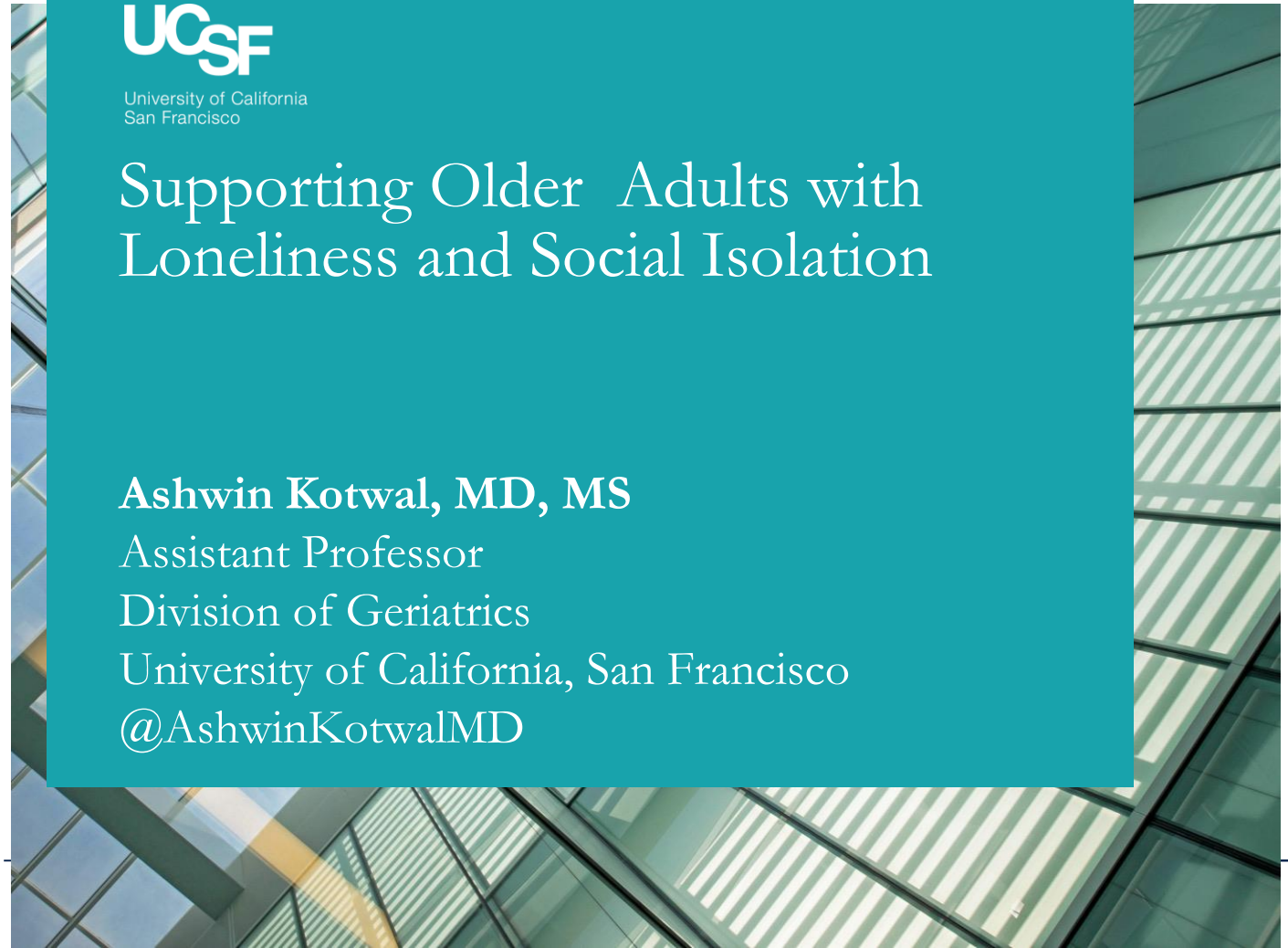
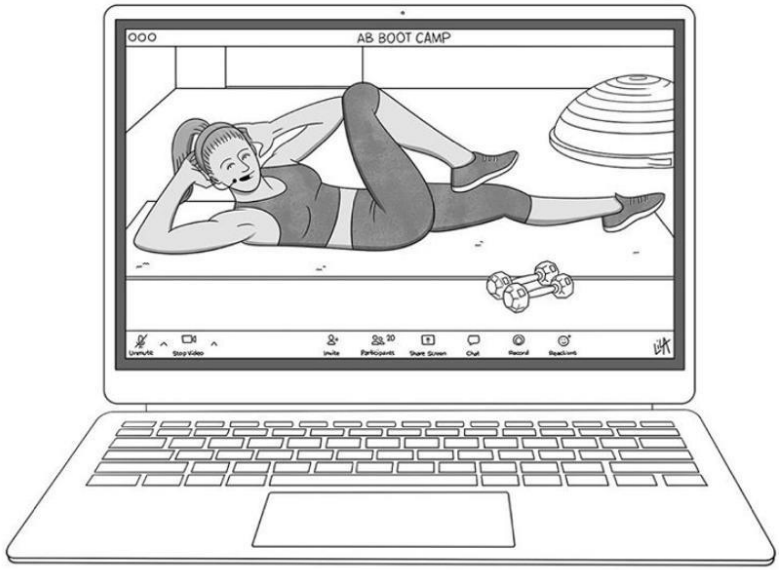


University of California
San Francisco

Supporting Older Adults with Loneliness and Social Isolation

Ashwin Kotwal, MD, MS
Assistant Professor
Division of Geriatrics
University of California, San Francisco
@AshwinKotwalMD

Checking in



"If you don't have weights at home, try using canned food or the psychological burden of simply existing in this world!"

Lila Ash, New Yorker 4-17-2020

Today's Goal

Have a conversation about loneliness and social isolation among older adults, including special populations, and emerging strategies to support their needs.

We will discuss

1. How are loneliness and social isolation **defined**, and what are their **health effects?**

   Goal: Define each term and identify at least 3 proposed mechanisms by which they impact health.

1. How do the **COVID-19 precautions** and other **unique situations** impact loneliness and isolation?

   Goal: Understand the diversity of individual experiences of loneliness and isolation

1. How can we **support** individuals experiencing loneliness and social isolation?

   Goal: Apply and adapt available interventions to the needs of your communities

Understanding Magnitude and Prevalence

MEASUREMENT AND DEFINITIONS MATTER

UCSF

Loneliness Defined

- Loneliness is the *subjective* feeling of being alone
- "the distress that results from discrepancies between ideal and perceived social relationships."

Cacioppo. U. Chicago 2009
http://psychology.uchicago.edu/people/faculty/cacioppo/jtcreprints/hc09.pdf

Loneliness and age (USA, 2014)

43% in people age >60 in the US

9% "ALWAYS" Lonely in UK

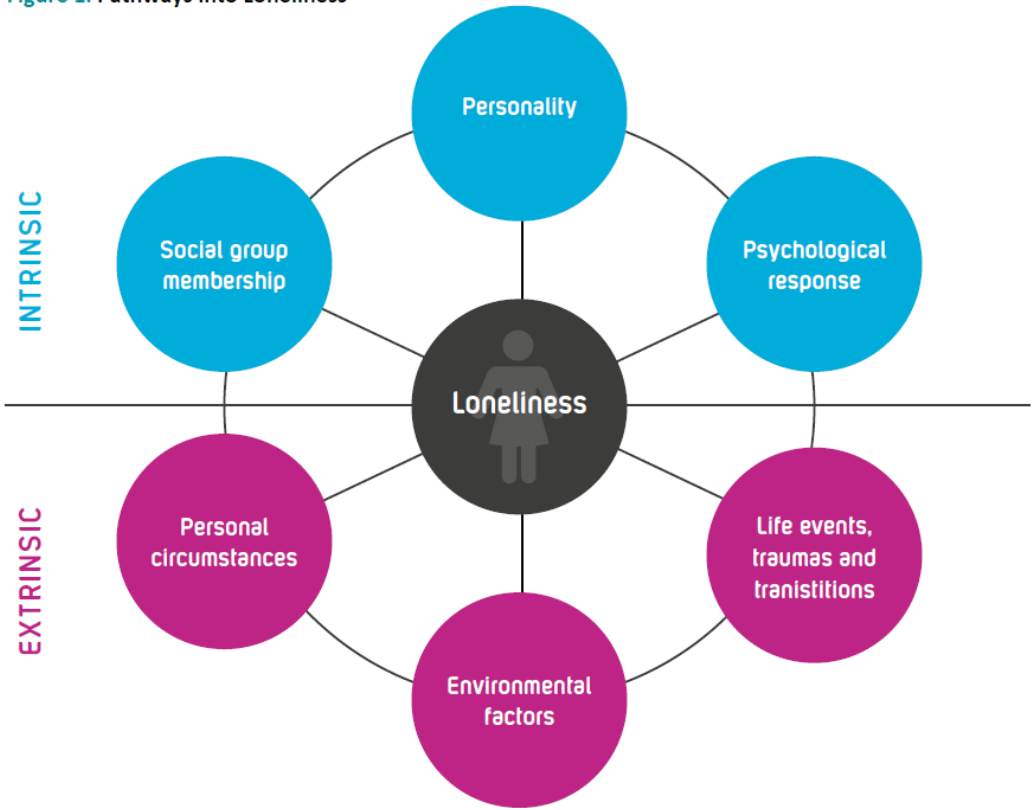
Victor 2015
Perissinotto 2012

UCSF

Myths about loneliness

- It is a normal part of aging
- It is synonymous with depression
- It cannot occur if you live with others and have friends
- It does not exist in married couples
- It will go away if you join a social group

Figure 1: Pathways into Loneliness



Optimizing Aging Collaborative at UCSF

Geriatric Workforce Enhancement Program

Goodman, A, Adams, A, Swift, HJ. Hidden citizens: How can we identify the most lonely older adults. 2015. The Campaign to End Loneliness: London.

UCSF

JAMA Internal Medicine July 23, 2012

Loneliness in Older Persons: A Predictor of Functional Decline and Death

Carla Perissinotto, MD, MHS, Irena Cenzer, MA, Kenneth Covinsky, MD, MPH

- National survey of 1604 adults aged >60 followed for 6 years
- Asked if they were lonely - UCLA Loneliness Scale
  - classified as lonely if responded “some of the time or often to any of the 3 questions”
- Outcomes:
  - Death
  - Decline in Function
    - Activities of Daily Living (ADLs)
    - Other mobility tasks

Who is lonely: challenging assumptions

Characteristic		Lonely (N = 693)	Not Lonely (N= 911)	P-value*
Demographics	Age (mean, SD)	71.3 ± 7.9	70.5 ± 7.2	0.041
	Age Category, %			
	60-65	29.0	30.5	0.062
	65-75	42.0	45.7	
	>75	29.0	23.8	
	Female, %	67.1	53.5	<0.001
	Ethnicity, %			
	White	76.2	85.8	<0.001
	Black	14.7	8.6	
	Hispanic	7.8	4.8	
	Other	1.3	0.8	
	Married or Partnered	62.5	83.9	<0.001
SES Measures	<HS education, %	26.8	19.0	<0.001
	Income, median (IQR)	28K (16K – 46K)	39K (24K – 65K)	<0.001**
	Net worth, median (IQR)	147K (46K – 375K)	245K (88K – 554K)	<0.001**
	Working for pay, %	19.1	28.4	<0.001
Living Arrangements	Living in Urban Area, %	66.6	70.9	0.065
	Living Alone, %	26.7	10.5	<0.001

UCSF

Health outcomes: disability and death

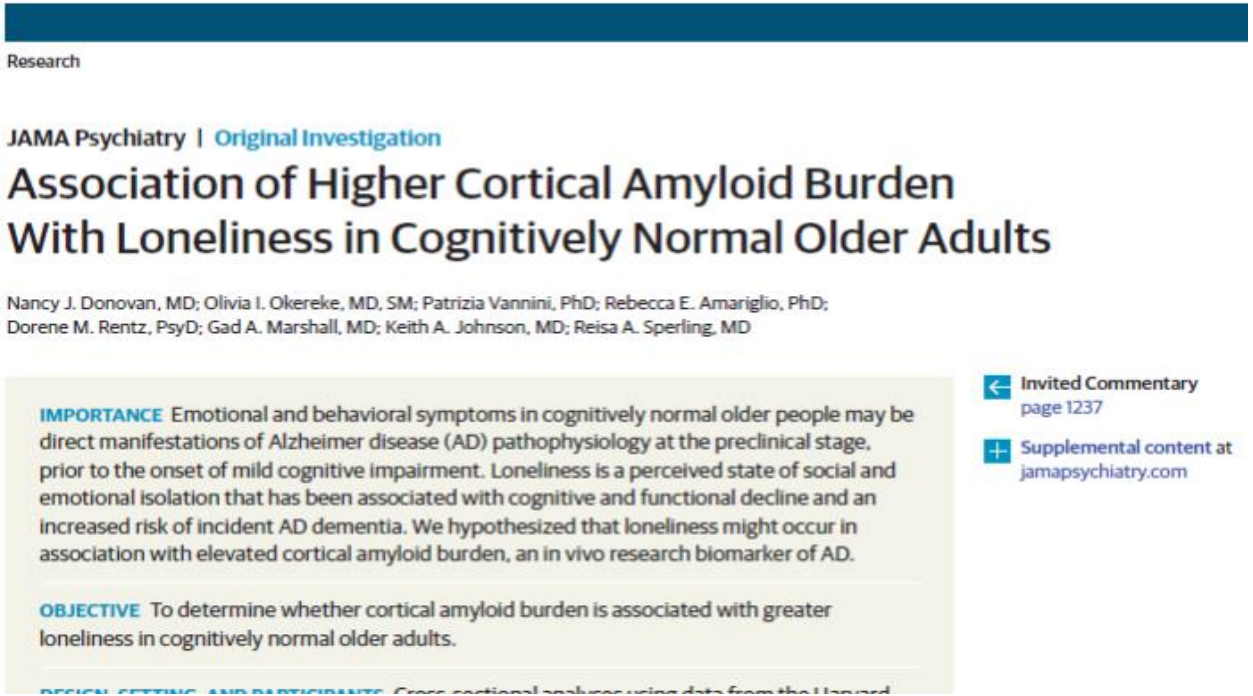
Table 2: Incidence of Outcomes in Lonely vs Not Lonely Subjects

Functional Measure	Eligible for outcome	Outcome Frequency		Unadjusted RR/HR (95% CI)	Adjusted[a] RR/HR (95% CI)
		Lonely	Not Lonely		
ADLs	1233	24.8%	12.5%	1.98 (1.55, 2.53)	1.59 (1.23, 2.07)
Upper Extremities	1166	41.5%	28.3%	1.47 (1.25, 1.72)	1.28 (1.08, 1.52)
Tasks					
Mobility	1114	38.1%	29.4%	1.30 (1.10, 1.53)	1.18 (0.99, 1.41)
Climbing	1062	40.8%	27.9%	1.46 (1.23, 1.73)	1.31(1.10, 1.57)
Death[b]	1604	22.8%	14.2%	1.70 (1.35, 2.15)	1.45 (1.11, 1.88)

Study Conclusions:

- Loneliness is common
- It is an independent predictor of functional decline
- It is an independent predictor of death
- We still have much to learn….

Other Results: Alzheimer's and Loneliness



Research

JAMA Psychiatry | Original Investigation

Association of Higher Cortical Amyloid Burden With Loneliness in Cognitively Normal Older Adults

Nancy J. Donovan, MD; Olivia I. Okereke, MD, SM; Patrizia Vannini, PhD; Rebecca E. Amariglio, PhD; Dorene M. Rentz, PsyD; Gad A. Marshall, MD; Keith A. Johnson, MD; Reisa A. Sperling, MD

IMPORTANCE Emotional and behavioral symptoms in cognitively normal older people may be direct manifestations of Alzheimer disease (AD) pathophysiology at the preclinical stage, prior to the onset of mild cognitive impairment. Loneliness is a perceived state of social and emotional isolation that has been associated with cognitive and functional decline and an increased risk of incident AD dementia. We hypothesized that loneliness might occur in association with elevated cortical amyloid burden, an in vivo research biomarker of AD.

OBJECTIVE To determine whether cortical amyloid burden is associated with greater loneliness in cognitively normal older adults.

Invited Commentary page 1237

Supplemental content at jamapsychiatry.com

Health Effects of Loneliness

- Emotional distress
- Increased stress response
- Decreased
  - Sleep
  - motor function
  - self care
  - engagement with medical community
  - Thought to be a “wear and tear” on our body

Social Isolation Defined

- Social isolation refers to a complete or near-complete lack of contact with society
- Relates to a *quantifiable* number of relationships

Social isolation affects nearly *1 in 5* older adults.

Social isolation, loneliness, and all-cause mortality in older men and women

Andrew Steptoe[1], Aparna Shankar, Panayotes Demakakos, and Jane Wardle

Department of Epidemiology and Public Health, University College London, London WC1E 6BT, United Kingdom

Edited by Kenneth Wachter, University of California, Berkeley, CA, and approved February 15, 2013 (received for review November 12, 2012)

Both social isolation and loneliness are associated with increased mortality, but it is uncertain whether their effects are independent or whether loneliness represents the emotional pathway through approaches for support of older people. The purpose of our study was to investigate the associations of social isolation and loneliness with mortality in a representative national sample of older men and

- 6500 men and women over 7 years
- Mortality higher in socially isolated AND lonely
- Loneliness NOT independent of demographic factors

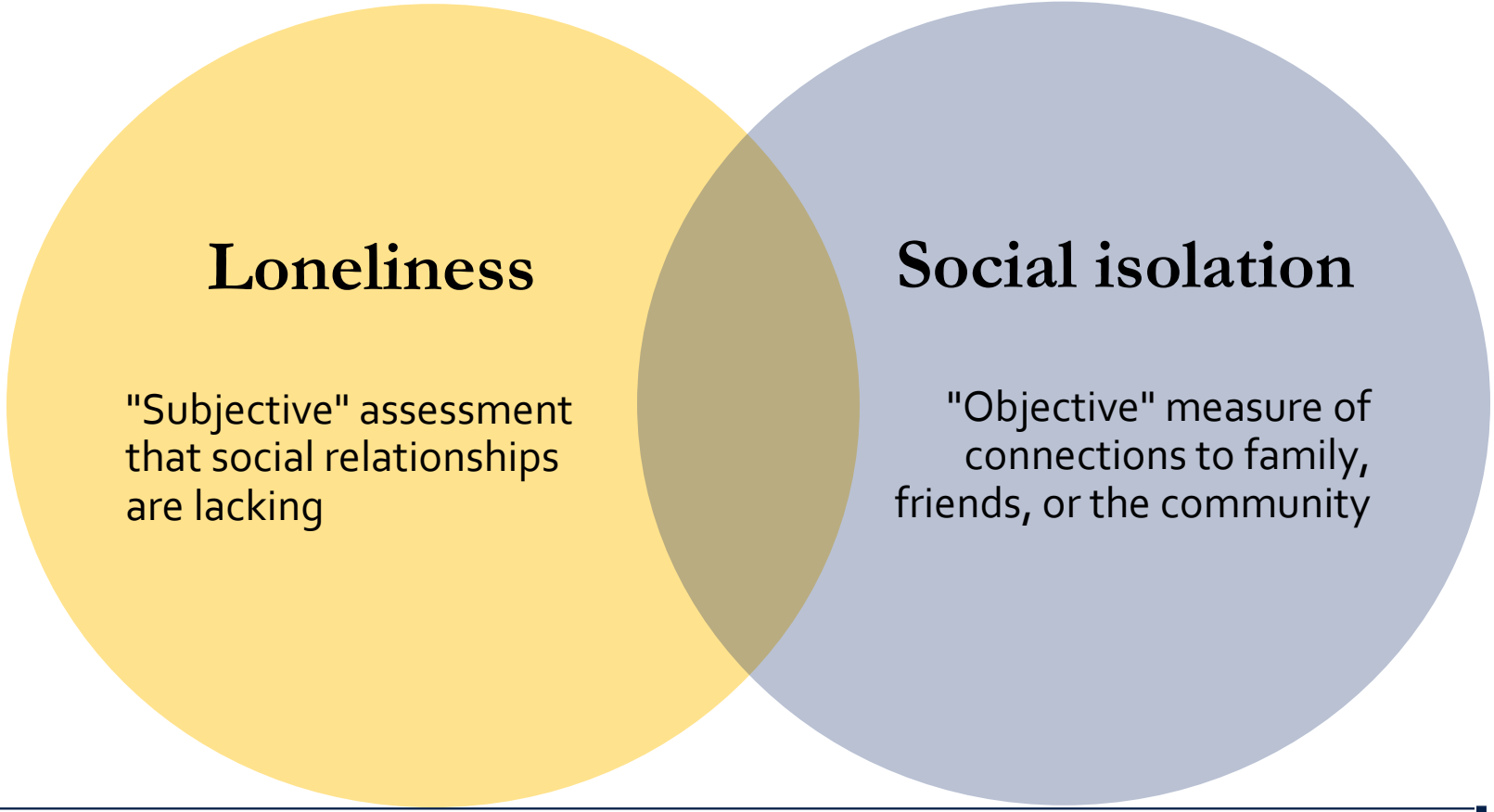
UCSF

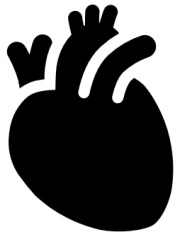
Cardiovascular Risk

- Original Investigation|July 23, 2012

- Living Alone and Cardiovascular Risk in Outpatients at Risk of or With Atherothrombosis

Jacob A. Udell, MD, MPH; et al. *Arch Intern Med.* 2012;172(14):1086-1095.


Loneliness
"Subjective" assessment that social relationships are lacking
Social isolation
"Objective" measure of connections to family, friends, or the community



Health Effects

May be harmful at any age, and likely worse for older adults.

Social isolation and loneliness are associated with:

- Worsened heart disease
- Worse control of diabetes
- Poor Sleep and depression
- Frailty and functional decline
- Alzheimer's dementia
- **HIGHER** health care costs
- Increased mortality

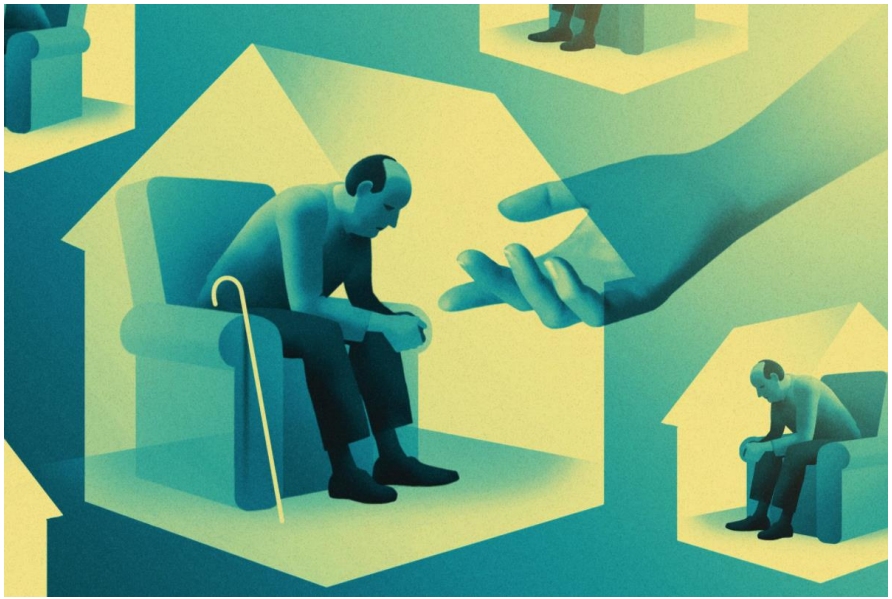
Have you noticed other health effects of loneliness and/or social isolation in the communities you serve?

COVID-19 and Other Special Situations

THE NEW OLD AGE

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

Our study

- Older Adults in San Francisco
- Three Sites:
    - (1) UCSF Geriatrics Clinics
    - (2) Covia Senior Life
    - (3) Curry Senior Center
- **Volunteer Interviewers**
- Phone surveys and 2-week follow-ups
    - Psychological well-being
    - Social connections
    - Key medical needs
- Ongoing Study

UCSF Geriatrics
Department of Medicine

covia

Curry Senior Center

UCSF

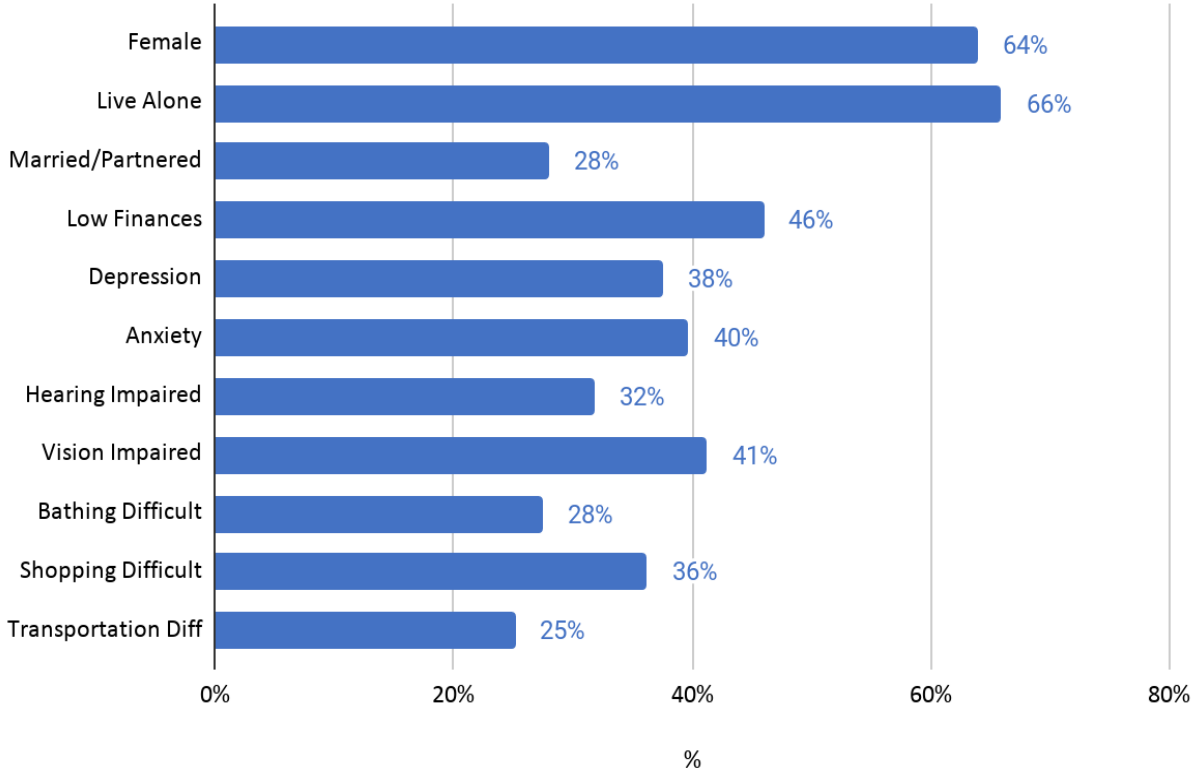
Who we interviewed

151 Respondents

- 649 total interviews conducted

Characteristics:

- 75 years old on average
- Race/Ethnicity:
  - White: 70%
  - Black/AA: 9%
  - Hispanic: 5%
  - Asian: 8%
  - Multiethnic/Other: 9%



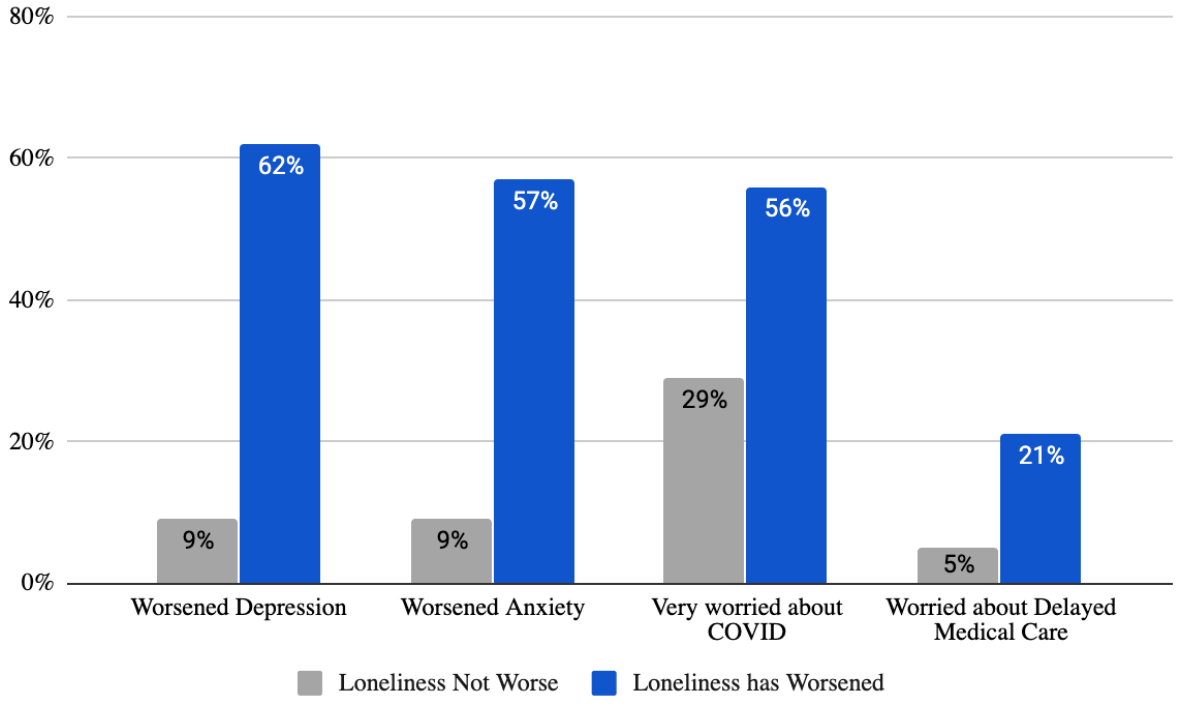
Loneliness during COVID-19 shelter-in-place

Many older adults have experienced **worsened loneliness**

Frequent feelings of loneliness: 29%

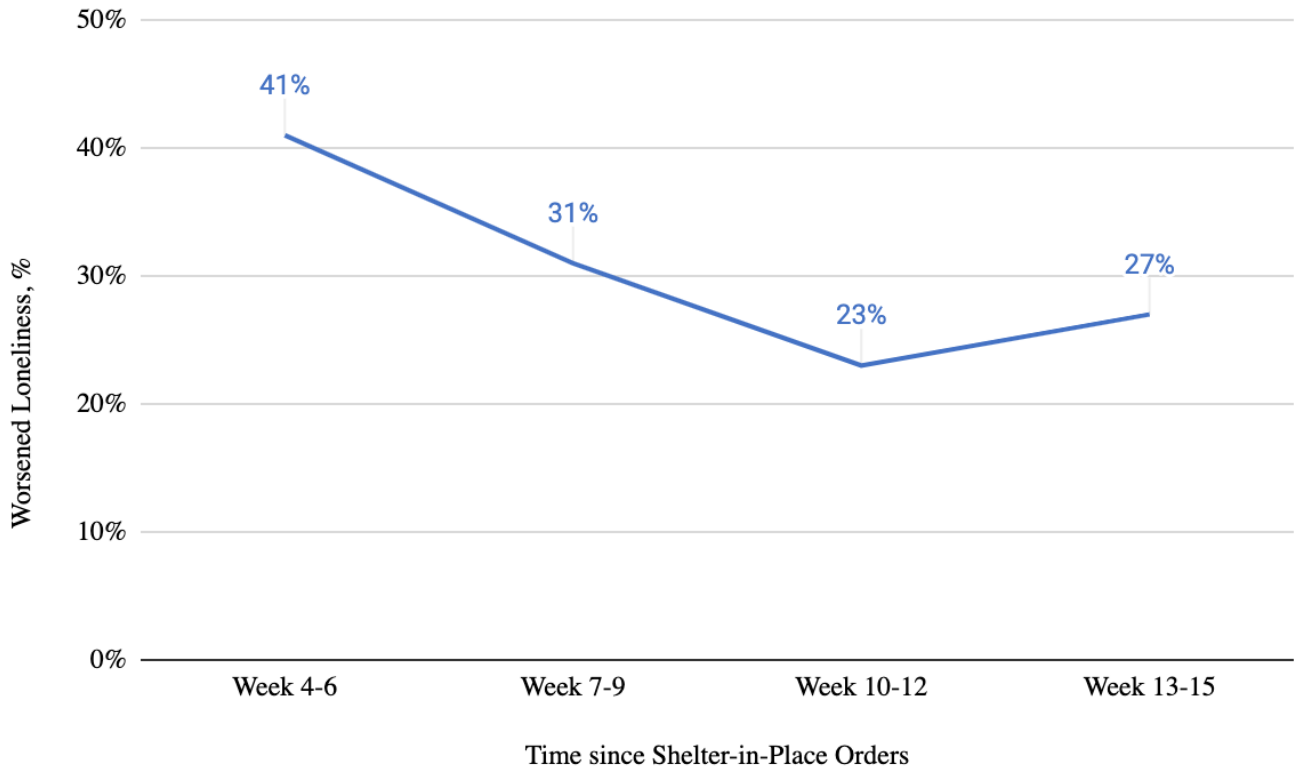
How have your feelings of loneliness changed due to COVID-19?

- Worse: 51%
- Same or Better: 49%

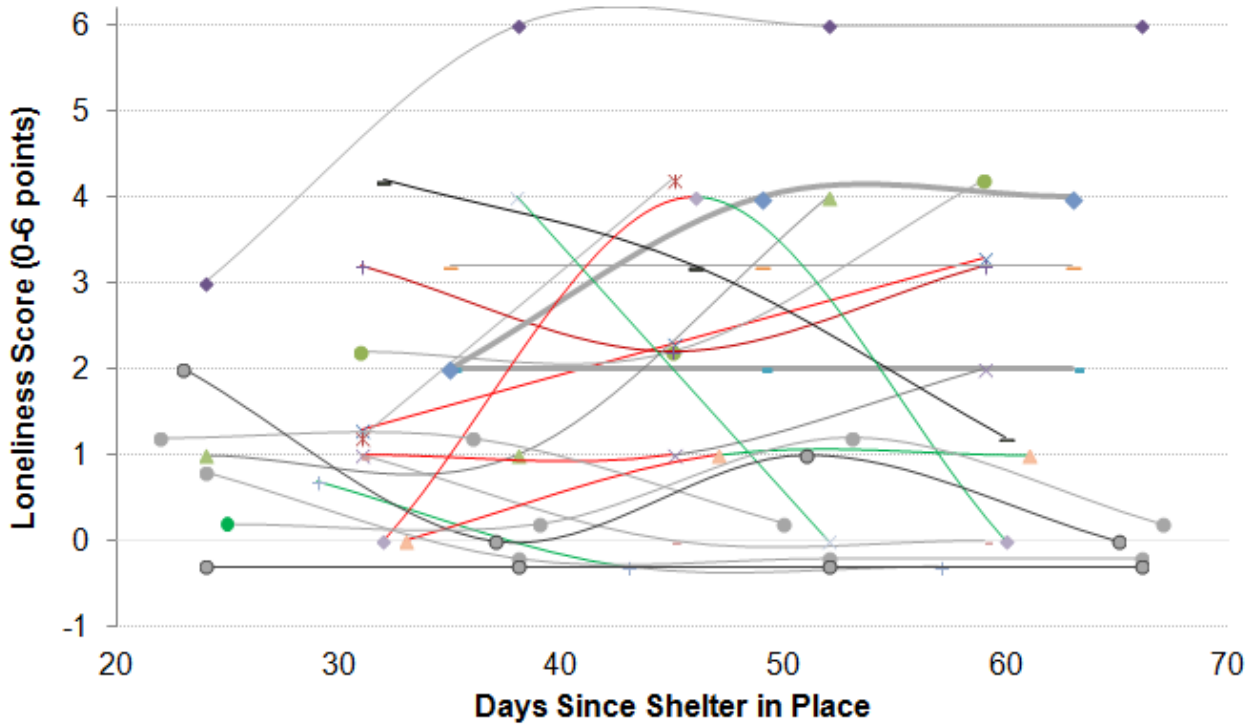


UCSF

Loneliness over time since shelter-in-place



Loneliness over time: **Diversity** of individual experiences

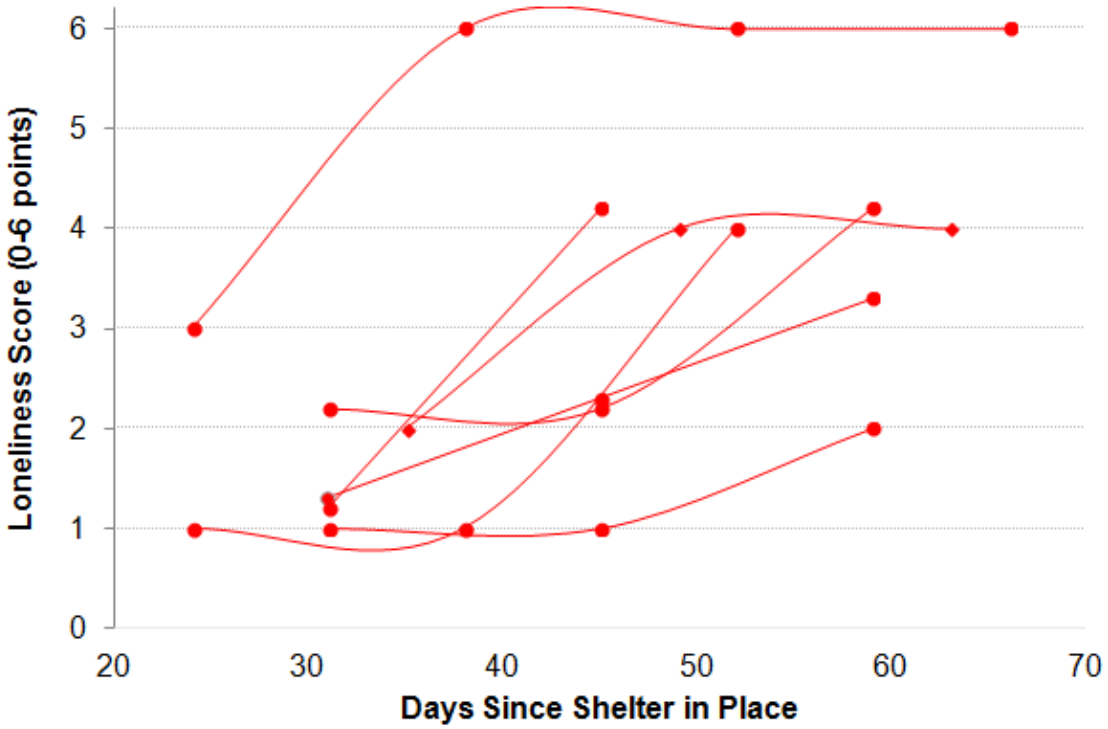


Three general patterns

1. Loneliness Worsens

"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."

64 year old
Female



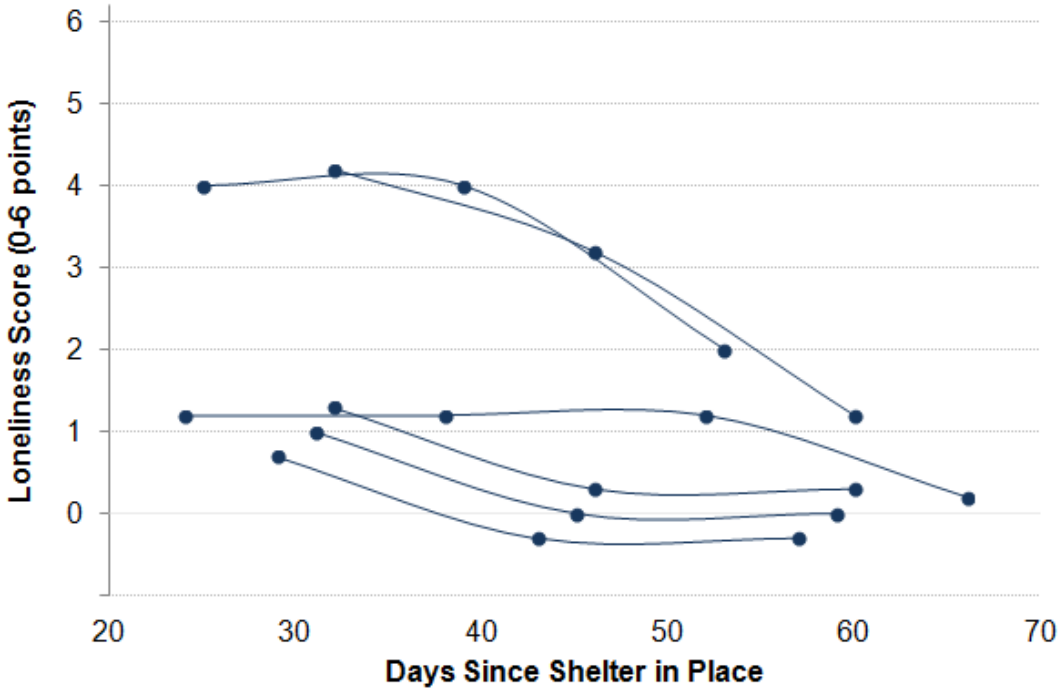
UCSF

Three general patterns

1. Loneliness Worsens
2. **Initially bad, but improves**

"I do reach out to people when I feel lonely. I'm trying not to make a big deal out of it because I know it is temporary. I am feeling better in the last 2 weeks because I am more informed and know what is going on due to the virus."

66 year old
Female



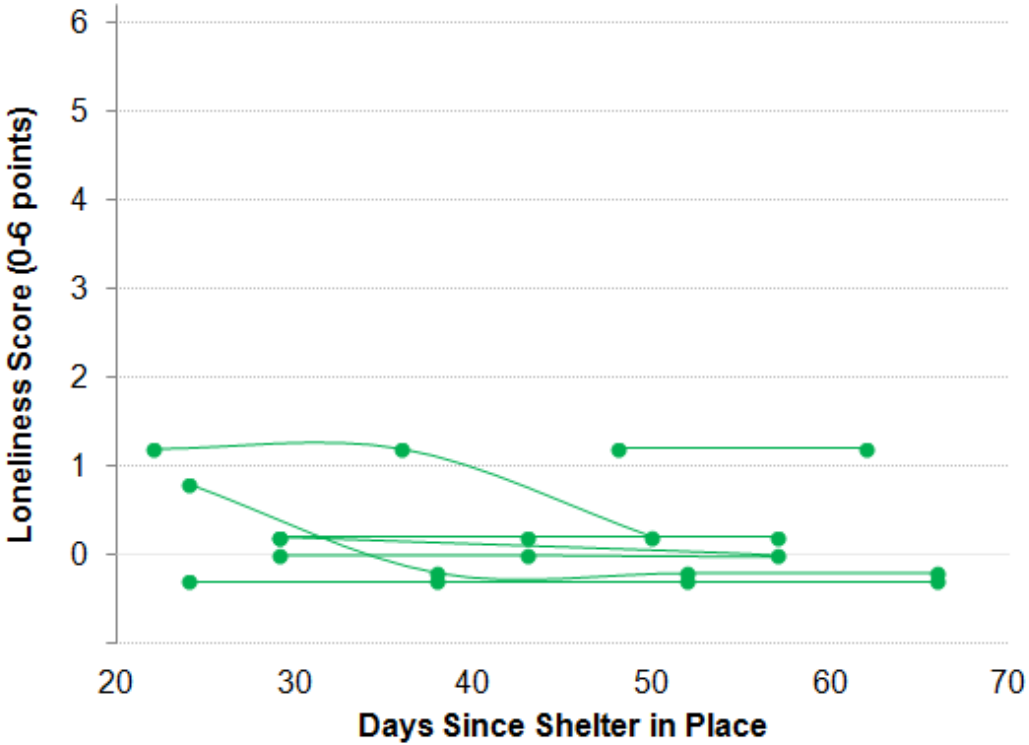
UCSF

Three general patterns

1. Loneliness Worsens
2. Initially bad, but improves
3. **Not negatively affected**

"I have had more support during these times than before. I have learned more during this time [about] technology. Because of quarantine I had a chance to read more and … to help other people through technology."

65 year old
Female



UCSF

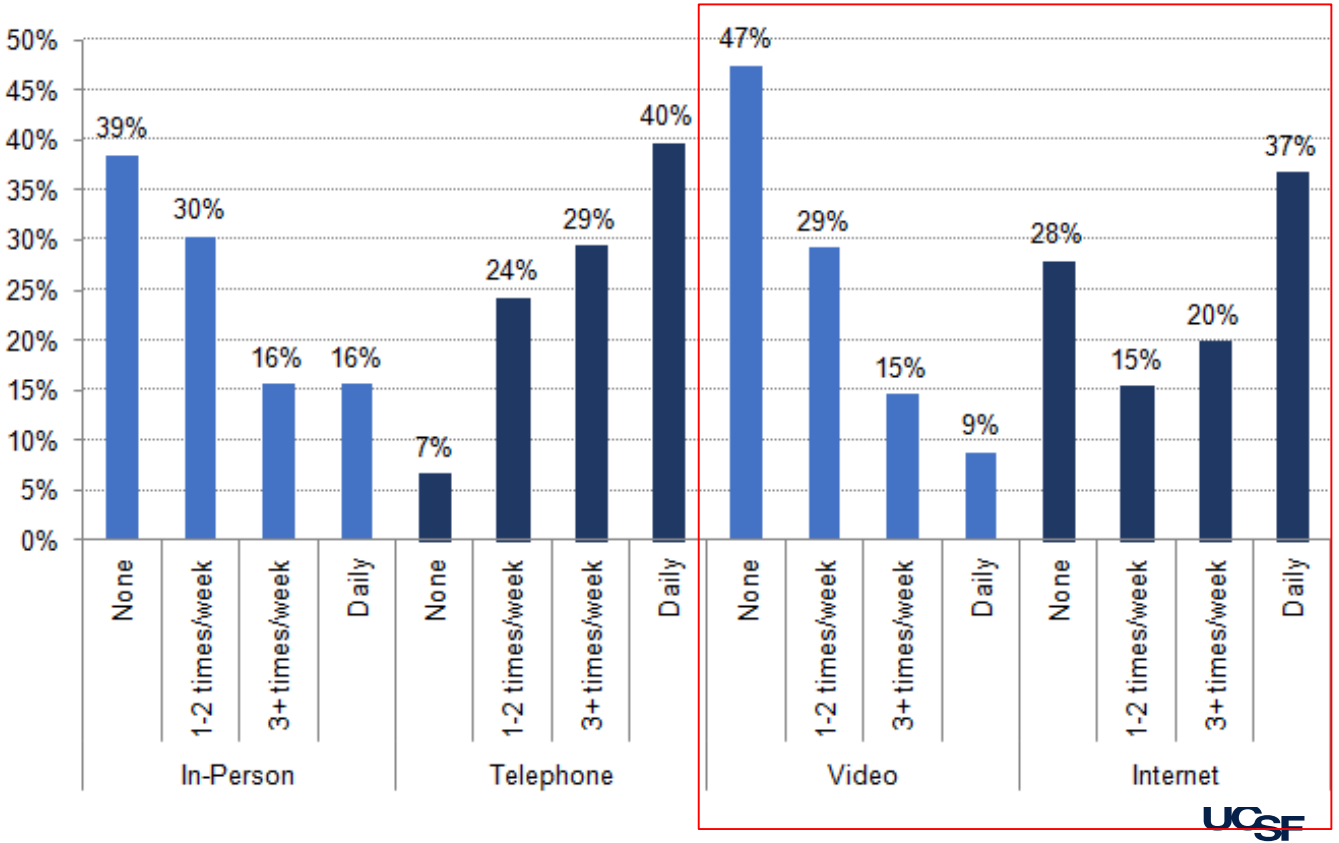
Social Isolation and Obtaining Help
during COVID-19 shelter-in-place

Social Connections

- Telephone communication is most common

- 79% had minimal or no video interactions

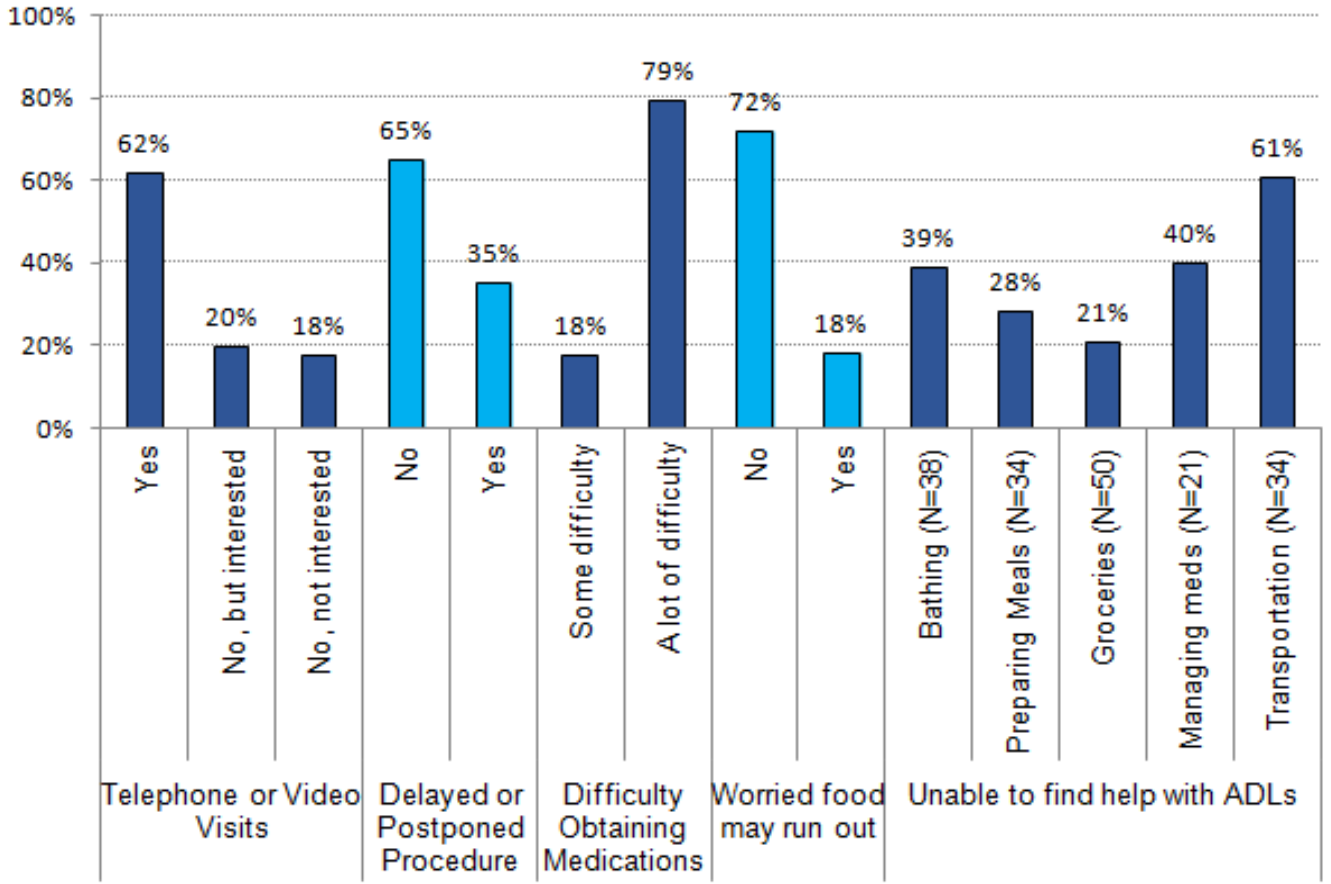
- 43% have minimal internet use



Getting Help

Areas of need:

- Support with video clinical visits (20%)
- Obtaining meds (20%)
- Food insecurity (20%)
- Assistance with ADLs or IADLs (20-60%)

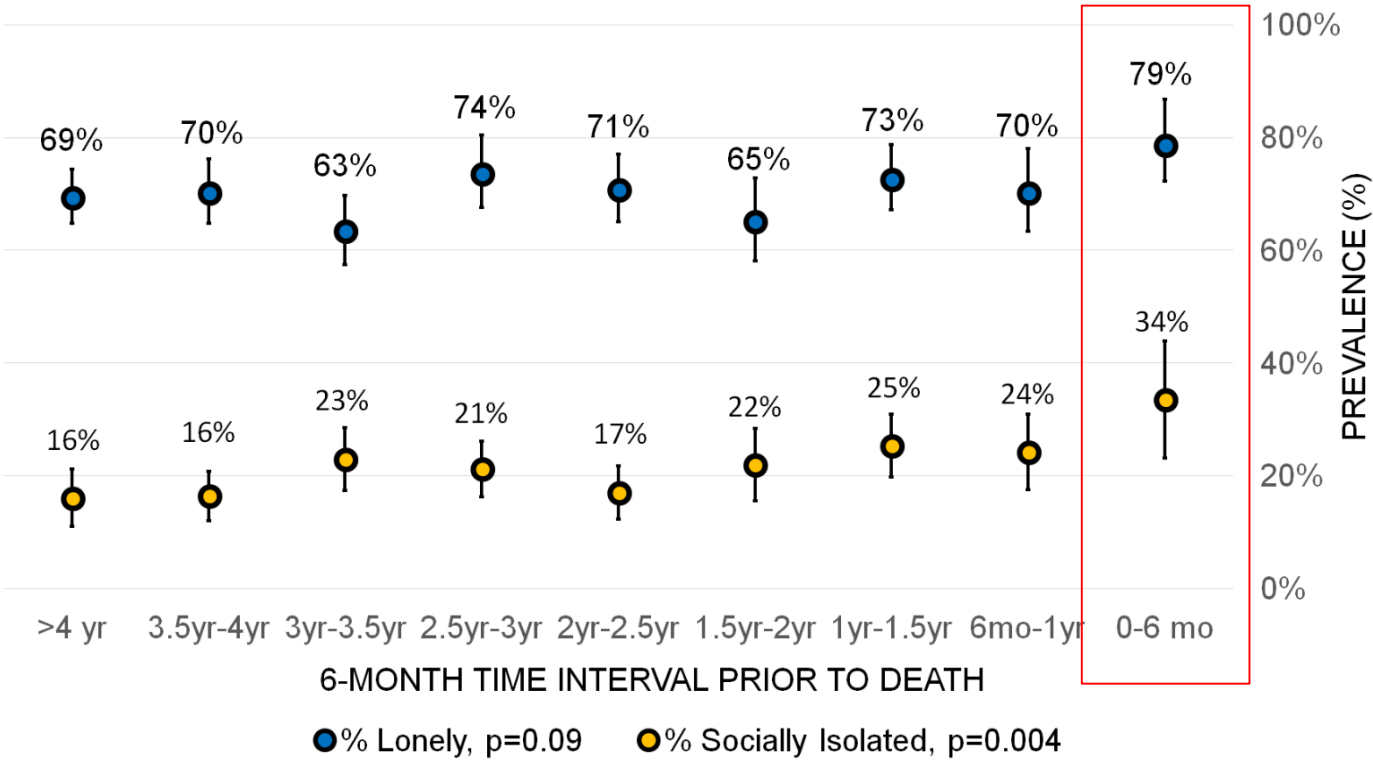


Other Health Situations

Seriously Ill Older Adults

Nearly 4 in 5 older adults are lonely (79%)

Social Isolation doubles in the last 6 months of life (34%)



Kotwal, A. et al.; 2020 American Academy for Hospice and Palliative Medicine

Seriously Ill Older Adults

Sociodemographic Risk Factors: Wealth and Marital Status

[insert figure]

Kotwal, A. et al.; 2020 American Academy for Hospice and Palliative Medicine

Seriously Ill Older Adults

Functional Health: Meal Preparation, Hearing Impairment, Cognition

[insert figure]

Age and Medical Diagnoses were LESS relevant to social well-being

Kotwal, A. et al.; 2020 American Academy for Hospice and Palliative Medicine

The Relationship of Loneliness to End-of-Life Experience in Older Americans: A Cohort Study

Nauzley C. Abedini, MD, MSc,[*†‡] *HwaJung Choi, PhD,*[‡§¶] *Melissa Y. Wei, MD, MPH, MS,*[‡¶] *Kenneth M. Langa, MD, PhD,*[‡§¶] *and Vineet Chopra, MD, MSc*[†‡‖]

- Lonely older adults were:
  - More likely to experience higher overall symptom burden, including pain, dyspnea, and fatigue at the end of life
  - More likely to use “life support” at the end of life

Abedini , N. et al. 2020. *Journal of the American Geriatrics Society.*

How have experiences with loneliness and social isolation varied in the communities or patients you serve?

Supporting those experiencing loneliness and/or social isolation

"All doctors soon learn that their patients consult them far less often for specific illnesses than because they are unhappy and seek relief from their loneliness and despair."

INTEGRATION INTO PUBLIC HEALTH AND HEALTH SYSTEMS

-Goldberg, 2001

Social Isolation and Loneliness In Older Adults: Opportunities for the Health Care System

Recommendations

- Develop a more robust **evidence base**
- Translate current research into **health care practices**
- Improve **awareness**
- Strengthen ongoing **education and training**
- Strengthen **ties** between the health care system and community-based networks and resources

Small Group Activity

Zoom Break-out Groups of 5-10 people (10 minutes)

1. What is your care setting?
2. What are strategies you use to address feelings of loneliness?
3. How do you address social isolation or its consequences?

Key Lessons

1. Many older adults are experiencing worsened loneliness, but it is not universal.

Do not assume you know who is or is not lonely.

<u>Consider screening tools:</u>

- Loneliness: Do you feel isolated from others?

- Social isolation: Berkman-Syme Social Network Index

Population Level Framework

Primary Prevention: Identify patients at risk for loneliness and Isolation

Women, lower SES, older, LGBT

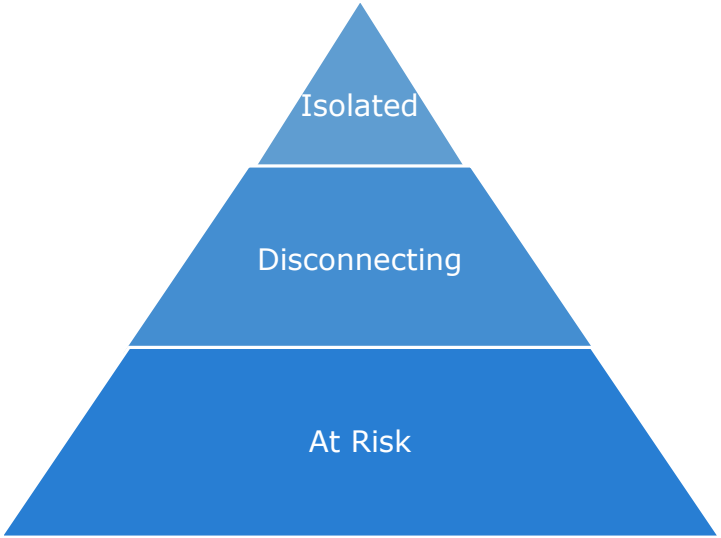
Recent losses

Secondary Prevention: decrease the consequences for those who are lonely and or isolated

Requires screening

Knowing which interventions work

Pyramid of Vulnerability:



Individualized and intensive intervention

Awareness
Education
Identify and address risk
Build resilience

Detection

Jeremy Nobel, MD MPH
EA Casey

Key Lessons

2. If individuals screen positive for loneliness, think about why they are lonely and focus your advice on those mechanisms.

Management of Loneliness

- Complex because of the complex ways people become lonely

Direct Interventions

- Improve social skills
- Enhance social support
- Increase opportunities for social interactions
- Address maladaptive social cognition

Indirect Interventions

- Vision & Hearing
- Urinary incontinence
- Dental Care
- Exercise Prescriptions

Ong, AD, Uchino, B, Wethington, E. Loneliness and Health in Older Adults: a Mini-Review and Synthesis. Gerontology, 2015, Nov 6 (Epub ahead of print); Masi et al. *Pers Soc Psychol Rev*. 2011

Direct - Opportunities for Social Connections

- **Social Prescribing**
  - Connecting individuals to social services programs
  - Often underused due to weak or nonexistent link between health providers and community-based services
- **Community Groups**
  - Peer-support groups
    - Friendship enrichment program
    - Support for common causes of isolation and loneliness (bereavement, widowhood, etc)
  - Group activities
    - SilverSneakers fitness program
    - Tai chi with “health ambassadors” to create sense of community and peer-to-peer relationships
    - Online forums and virtual communities

Direct Interventions - Maladaptive Cognition

- **Cognitive Behavioral Therapy** (In-person or Online)
  - Teach individuals to identify negative perceptions and irrational beliefs which impede relationship building
  - Help individuals reframe thoughts about relationships, assumptions about others' views, or expectations

- **Mindfulness Training**
  - Teaches a person to maintain openness, patience, and acceptance
  - Smartphone-based training for 2 weeks reduced daily loneliness among participants by 22% compared to control group

Direct Interventions - Technology

- Social Media
  - Caution as there have been reports of worsened loneliness
- Virtual Reality
  - Use of VR headsets
- Social Robots
  - Paro (robotic baby seal) studied with older adults with and without cognitive limitations
  - Aibo (robotic dog)
  - Conversation agents: Alexa, Google Home voice-based personal assistants
- Video-mediated “friendly visits”

Direct Interventions - Phone Lines

- Friendship Line (age 60+ or with disabilities): 1-800-971-0016
- Oregon Senior Loneliness Line (age 55+)
  503-200-1633, 1-800-282-7035
- Well Connected (phone + online community center)
  https://covia.org/services/well-connected/
- Virtual Senior Academy: https://virtualsenioracademy.org/
- Selfhelp's Virtual Senior Center: selfhelp.net

Long-term Care Settings during COVID-19

- Encouraging Interactions with Family
  - Proactive Calling by Family members
  - Socializing through the windows
  - Mailing cards, postcards, or care packages
  - Recordable audio-greetings

Simard J, Volicer L. Loneliness and Isolation in Long-term Care and the COVID-19 Pandemic. *J Am Med Dir Assoc*. 2020;21(7):966-967. doi:10.1016/j.jamda.2020.05.006

UCSF

Long-term Care Settings during COVID-19

- Facilitating online connections through iPads or Tablets
- Creative Video-Conferencing
  - Make and ‘share’ meals together
  - Storytime
  - Multiplayer online puzzles
  - Online game night
  - Virtual book club
  - Live performance (music, theatrics)
  - Meditation and mindfulness practice together
  - Virtual exercise class

In-person interactions (yes… I said it!)

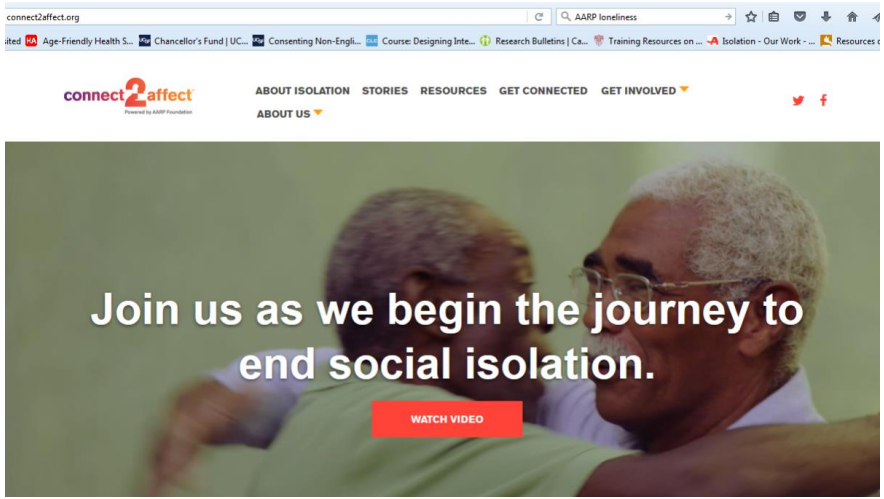
- Socializing by the window
  - Outdoor performances
  - Outdoor walks
  - Develop your ‘social pod’
  - Seniors for seniors pet adoption
  - Be visible - wear your picture or a name tag

Key Lessons

3. If individuals screen positive for loneliness or social isolation, ask what they think might be a solution to their loneliness

Community organizations:

- Area Agencies on Aging
- AARP: Connect 2 Affect



Key Lessons

4. If socially isolated, think about how to address unmet needs.

Unmet needs:

Technology: Facilitate use of technology

Food Insecurity: Screen and connect to community programs

Medications: Medication delivery programs, bubble packs

ADL/IADL Support: Exceptions for needed in-person interaction

Perfect time for Advocacy

- Speak up for those who can’t
- Write letters to your legislators
- Write letters to agencies overseeing long term care facilities
- “Meet” with your representatives
- Personal stories and experience are powerful

Thank You!

- Ashwin Kotwal; ashwin.kotwal@ucsf.edu