LONELINESS IN AN URBAN, UNDERSERVED RESIDENCY CLINIC:

PREVALENCE AND ASSOCIATION WITH HEALTH CARE UTILIZATION

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DISCLOSURES

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COLLABORATORS

- Jason Ricco, MD MPH – faculty physician at University of Minnesota's North Memorial FMR Program

- Paul Stadem, MD – 3rd year resident at University of Minnesota's North Memorial FMR Program

OBJECTIVES

- Explain how social isolation impacts health outcomes and mortality rates
- Describe the prevalence of social isolation in an urban, underserved family medicine residency clinic
- Describe demographic and clinical predictors of loneliness, as well as how loneliness may influence healthcare utilization

WHAT IS LONELINESS?

Social connection is a multifactorial concept that includes:

- **Objective connection**
  - Social network size
  - Marital status / family
  - Geographic isolation
- **Subjective connection**
  - Perceived support
  - Perceived loneliness

REGARDLESS OF THE *QUANTITY* OF THEIR RELATIONSHIPS,

INDIVIDUALS WHO FEEL LONELY ARE *NOT SATISFIED* WITH THE *QUALITY* OF THEIR SOCIAL CONNECTIONS

Gerst-Emerson K, et al. Am J Public Health. 2015;105(5):1013-1019

ASSOCIATIONS WITH NEGATIVE HEALTH OUTCOMES

Lonely people are at increased risk of:

- Heart disease
- Stroke
- Depression
- Cognitive decline

Holt-Lunstad, et al. *Heart*. 2016;102(13):987-989; Hawkley et al. *Psychol Aging*. 2006;21(1):152-164;
Gonye, et al. *J Aging Health*. 2018;30(3):458-474; James et al. *J Int Neuropsychol Soc*. 2011;17(6):998-1005.

LONELINESS KILLS

Individuals with inadequate social connection have 30-50% increase in all cause mortality

This is an effect similar to smoking at least 15 cigarettes per day

Holt-Lunstad et al. *PLoS Med.* 2010;7(7):e1000316.

KNOWLEDGE GAP

Majority of research on loneliness focused on **white, elderly** populations

- Prevalence ranges from 8-56%

Gerst-Emerson et al. *Am J Public Health*. 2015;105(5):1013-1019.;
Nyqvist et al. *Scand J Public Health*. 2017;45(4):411-418.;
Victor et al. *J Cross Cult Gerontol*. 2012;27(1):65-78.

THE PURPOSE OF THIS STUDY:

1. Estimate the prevalence of loneliness in an urban, underserved family medicine residency clinic

2. Examine associated clinical factors and the relationship between loneliness and healthcare utilization

3-ITEM UCLA LONELINESS SCALE

- How often do you feel that you lack companionship?
- How often do you feel left out?
- How often do you feel isolated from others?

Response options:

Hardly ever (1) Some of the time (2) Often (3)

Scoring: Sum of items

≥ 6 “lonely”

<6 “not lonely”

Hughes et al, *Res Aging*. 2004;26(6):655-672.

METHODS

1. All adult (≥18) patients seen at our clinic (Nov. 2018 to Jan. 2019) completed 3 item UCLA Loneliness Screen during rooming.

2. Electronic Health Record chart review completed
   Demographics, comorbidity, utilization variables

3. Retrospective case-control study design compared patients who identified as “lonely” to those “not lonely” using regression models, controlling for demographic and clinical characteristics.

Approved by the University of Minnesota IRB

STUDY DEMOGRAPHICS

n=330

Mean Age = 42.1 years, SD =14.9

Sex, Female = 63%

Race

- Black = 58%
- White = 30%

Marital status, Single= 75%

Insurance Coverage, Medicaid = 62%

RESULTS

44% of patients (145/330)

reported loneliness (≥6 on screener)

RESULTS

Patients who had **depression** were **2.26** (95% CI = 1.40, 3.66) times more likely to report loneliness

Patients who had a **substance use disorder** were **2.04** (95% CI = 1.19, 3.50) times more likely to report loneliness.

RESULTS

Controlling for covariates, patients who identified as black or African American were **2.22** (95% *CI* = 1.24, 3.99) times more likely than white patients to report loneliness.

Other demographics (age, sex, marital status, neighborhood median income) and comorbidities were not significantly associated with loneliness.

Loneliness is associated with increased healthcare utilization.

Lonely patients had:

Longer hospital stays

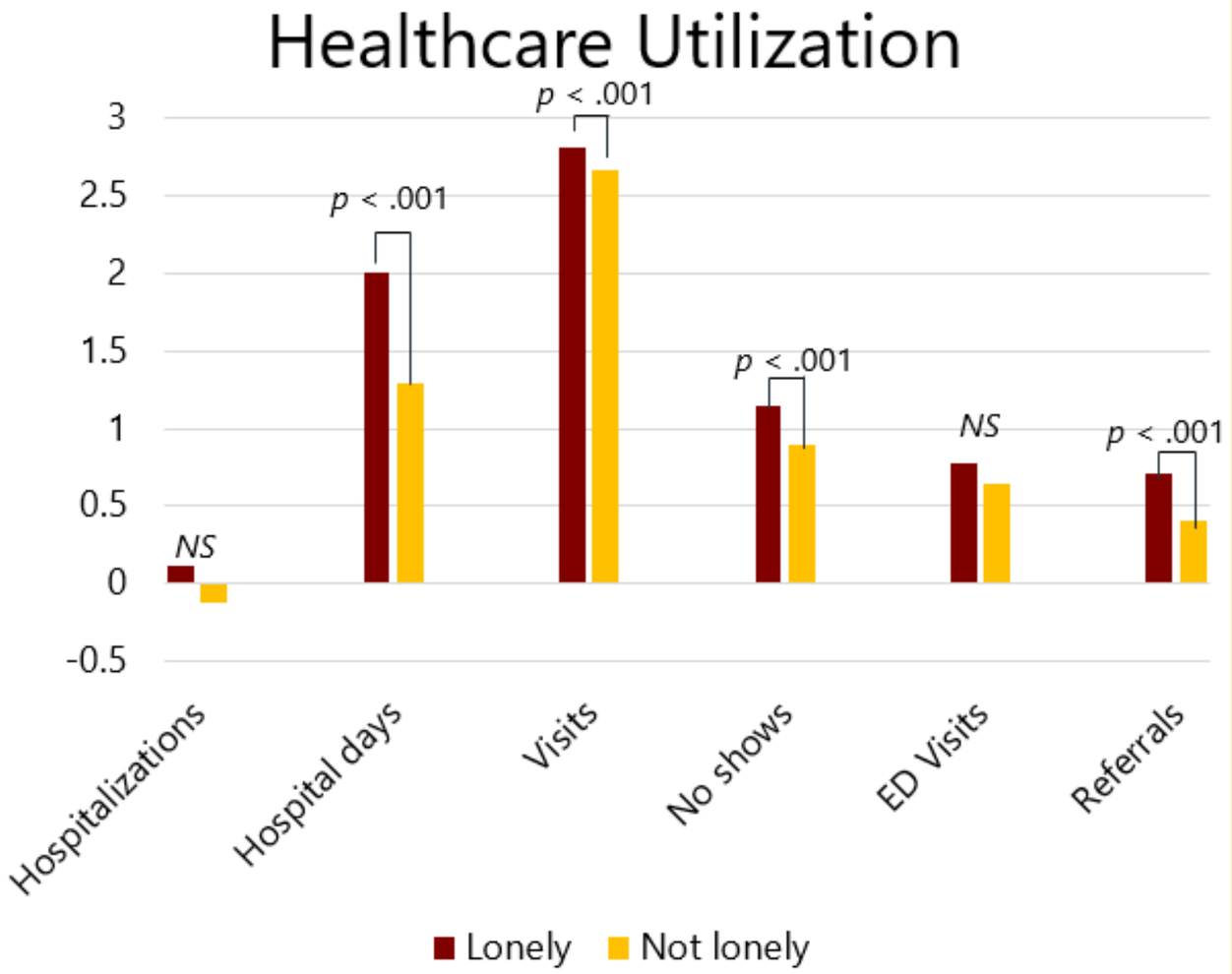
IRR = 2.04, 95% CI [1.70, 2.45]

More primary care appointments

IRR = 1.15, 95% CI [1.08, 1.22]

More no-shows

IRR = 1.27, 95% CI [1.13, 1.44]



*Poisson regression models adjusted for age, gender, marital status, race/ethnicity, country of origin, chronic conditions, depression, and substance use.

CONCLUSIONS

The overall **44%** prevalence of loneliness seen in this study is higher than reported in most previous studies

Identifying as black or African American, having depression, or having a substance use disorder all predicted loneliness in this younger, predominantly minority population.

Loneliness predicted longer hospital stays

NEXT STEPS

Research is needed to better understand how these factors influence loneliness

Explore how interventions to address loneliness could improve quality of life and reduce health care spending.

THANK YOU

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