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CONFERENCE ABSTRACT

Impact of social isolation and living alone on health service use, morbidity and mortality over time in Central and Eastern Sydney, Australia

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Introduction: Social isolation and living alone are perceived as potential risk factors for poor health outcomes and inappropriate and/or inadequate service use. It is estimated that the prevalence of social isolation and living alone among older people in Australia is 17% and 25% respectively and increasing. The role social isolation, living alone play in health service use, morbidity and mortality for older Australians is not clear, nor is the magnitude of its effect.

Problem statement: What are the factors associated with social isolation and living alone? What is the impact on health service use, morbidity and mortality in Central and Eastern Sydney (CES), Australia?

Methods: A record linkage study using Social Economic and Environmental Factors (SEEF) Study questionnaire data (45 and Up Study sub-study), Medicare Benefit Scheme (MBS) claims (Department of Human Services), hospitalisations and deaths (Centre for Health Record Linkage) was undertaken. Social isolation was defined as the lowest quintile using the Duke Social Support Index: social interaction sub-scale. Frequency of general practitioner (GP) and specialist visit calculated using the specific item numbers from the MBS data base, and frequency of hospital admission, and Emergency Department (ED) visits were calculated by counting records from the respective data bases. Risk ratios (RR) were used as the measure of association and multivariable Poisson regression models were used to adjust for the potential confounders.

Results: Of the 6,176 CES participants 1,213(19.6%) were socially isolated and 1,263(20.5%) lived alone (3.6% were both). After adjusting for all other factors: working full-time, current smoking, poor quality of life, having heart disease or anxiety were all more likely to be associated with social isolation; and being older, female, working full-time, and adequate physical activity were all more likely to be associated with living alone. There was a protective association between living alone and social isolation [AdjPR(95%CI):0.69(0.57-0.83)]. Participants who lived alone used health services more (GP 10% increase, ED visits and hospitalisations 5% increase) than those who didn' t. Health service use did not vary by social isolation status. Crude mortality rates, using a 7-year follow-up, were 106/1000 for social isolation and 139/1000 for living alone. After adjusting by age

and sex social isolation and living alone were not associated with any increased mortality [AdjRR(95% CI):1.08(0.88-1.32) and 1.18(0.98-1.43) respectively].

Discussion and Conclusion: We found that social isolation and living alone have different associations with service use, with living alone potentially being a measure of functional independence in older people. Social isolation and living alone, when adjusted by age and sex, were not predictors of increased mortality in CES. However, we have found associations for social isolations for New South Wales overall [AdjRR(95%CI):1.09(1.01-1.18)], but not for living alone [AdjRR(95%CI):1.05(0.94-1.18)].

Limitations and suggestions for future research: Loneliness is another construct of interest, defined as the mismatch between living arrangements and social interactions and what is desired. Our current data collections did not include a measure of loneliness. We are currently planning further research to better understand the interaction between loneliness, health service use, morbidity and mortality over time.