OLDER ADULTS AND FAMILY DISCORD OR VIOLENCE DURING THE COVID-19 PANDEMIC: RESULTS OF A CANADA-WIDE SURVEY

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Child abuse and intimate partner violence rates are known to increase during and in the aftermath of disasters. Research on elder abuse during disasters, including the current pandemic, is limited. As part of an online survey that explored older Canadians’ current experiences and future care plans during the COVID-19 pandemic, we aimed to determine the prevalence, contributing factors and potential outcomes of frequent family discord involving physical violence (FFD/PV) as a proxy for elder abuse. The survey was conducted between Aug 10 and Oct 10, 2021. Respondents (n=4380) were recruited using social media, direct email, Facebook advertising and with the assistance of 85 local community, regional and national organizations. The sub-sample reporting FFD/PV (n=76, 1.8%) was compared with other survey respondents regarding socio-demographic characteristics, negative and positive emotions, difficulty accessing basic needs, food, health care and support. Respondents experiencing FFD/PV were found to be significantly younger and less educated and were more likely to be non-white and not working than other respondents. The subgroup sustaining FFD/PV reported significantly higher rates of feeling depressed, lonely, isolated, anxious, sad, and judged/shamed and felt less happy, relaxed and accepted in their community. They also reported higher rates of challenges in accessing basic material needs such as food, support, medical care, mental health treatment and experienced more changes in life routines. Although only a small percentage reported FFD/PV, our results highlight a disturbing pattern that merits serious attention of adult protection agencies, seniors’ advocates and disaster response organizations.

PREDICTORS OF DEPRESSION IN HEALTHCARE PATIENTS AT RISK OF SELF-NEGLECT

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More than half of reports to Adult Protective Services agencies nationwide involve allegations of self-neglect. An intensive case management intervention for preventing self-neglect was evaluated in a longitudinal study conducted collaboratively by a large healthcare system, Adult Protective Services, and a gerontological research institute. Patients (444) who were older (60+ years) and/or disabled (18+ years) were randomly selected for participation from 19 primary-care clinics if they had risk factors for self-neglect, including depression, substance abuse, dementia, and/or impairment in activities of daily living. Average age was 68 years (SD=12.5), 68% were Hispanic, 68% had monthly income of less than $1,361, and 67% were female. Clinics were randomized into intervention and control groups. Intervention clinic patients received intensive case management services; control clinic patients received usual care, including social work services. Subjects were interviewed at baseline and four months later. The Stress Process Model guided a multiple regression analysis. Domains of background characteristics, primary and secondary stressors, and support (patients in intervention or control group) were entered in blocks to predict depression levels at post-test. While no significant differences were found in post-test depression levels between intervention and controls, the final model was statistically significant (adjusted R2=.452). Significant predictors of depression were: younger age (disabled adults), poorer self-rated physical and emotional health, greater loneliness, and less social support. Future analyses will examine effects of moderating variables on post-test depression levels. Practice implications of preliminary analyses include addressing disabled adults’ mental health needs, especially if they are isolated and lack social support.

Session 3040 (Symposium)

EXPANDING THE SCOPE OF ADMINISTRATIVE HEALTH RECORDS THROUGH ADVANCED STATISTICAL METHODS

Chair: Igor Akushevich
Co-Chair: Carl V. Hill
Discussant: Konstantin Arbeev

The objective of the Symposium is to expand familiarity of the application of advanced methods of modern statistical modeling and data management, to administrative health data by combining methodological innovations with practical hands-on demonstrations. Topics will cover a range of methodological and substantive topics including: i) decomposition and partitioning approaches in analysis of disparities and time trends in AD/ADRD; ii) new artificial intelligence technologies that allow us to enrich electronic health record datasets with self-report scores in geriatrics; iii) using administrative data to model adherence to disease management and health-related behavior; iv) the use of longitudinal extension of the average attributable fraction to study health disparities and multimorbidity; and v) the geographic and racial disparities in total and remaining life expectancies after diagnoses of AD/ADRD and other chronic conditions. The increasing availability of large-scale datasets based on electronic health records and administrative claims records provide an unprecedented opportunity for obtaining nationally representative results based on individual-level measures that reflect the real care-related and epidemiological processes. This makes the reduction of barriers to entry to the use of such data of vital importance to the community of geriatrics and health researchers.

DECOMPOSITION OF DISPARITIES IN ALZHEIMER’S DISEASE AND RELATED DEMENTIA

Igor Akushevich, Duke University, Durham, North Carolina, United States

This study uses Medicare data to non-parametrically evaluate race- and place-of-residence-related disparities in AD/ADRD prevalence and incidence-based mortality, separate them out into the epidemiological causal components...
including race-related disparities in incidence and survival, and finally explain these in terms of health-care-related factors using causal methods of group variable effects (propensity scores and the rank-and-replace method) and regression-based analyses (extended Fairlie’s model and generalized Oaxaca-Blinder approach for censoring outcomes). Partitioning analysis showed that the incidence rate is the main predictor for temporal changes and racial disparities in AD/ADRD prevalence and mortality, though survival began to play a role after 2010. Arterial hypertension is the leading predictor responsible for racial disparities in AD/ADRD risks. This study demonstrated that Medicare data has sufficient statistical power and potential for studying disparities in AD/ADRD in three interacting directions: multi-ethnic structure of population, place of residence, and time period.

NEW AI TECHNOLOGIES TO ENRICH ELECTRONIC HEALTH RECORD DATA SETS WITH SELF-REPORT SCORES IN GERIATRICS
Ricardo Pietrobon, SporeData, SporeData, North Carolina, United States

Although electronic health record data present a rich data source for health service researchers, for the most part, they lack self-report information. Although recent CMS projects have provided hospitals with incentives to collect patient-reported outcomes for select procedures, the process often leads to a substantial percentage of missing data, also being expensive as it requires the assistance of research coordinators. In this presentation, we will cover Artificial Intelligence-based based technologies to reduce the burden of data collection, allowing for its expansion across clinics and conditions. The technology involves the use of algorithms to predict self-report scores based on widely available claims data. Following previous work predicting frailty scores from existing variables, we expand its use with scores related to quality of life, i.e. mental health and physical function, and cognition. Accuracy metrics are presented both in cross-validation as well as external samples.

USING ADMINISTRATIVE CLAIMS TO MODEL HEALTH-RELATED BEHAVIORS: MEASURES OF SCREENING AND MEDICATION ADHERENCE
Arseniy Yashkin, Duke University, Morrisville, North Carolina, United States

We demonstrate how administrative claims records can be used to model certain behavioral patterns and associated health effects. The inability of administrative claims, which are in essence a billing record, to account for differences in behavior is a major limitation of such data which usually requires an externally linked source to overcome. However, for certain diseases, for which well-defined and accepted guidelines on screening and medication use exist, the claims themselves can provide a way for modeling health-related behavior. A practical application to screening and medication adherence for type II diabetes mellitus is presented. Diverse methods of the calculation of such indexes with their pros, cons and variation in identified effects are discussed and demonstrated using results based on administrative claims drawn from a 5% sample of Medicare beneficiaries.

DIFFERENCES IN THE RACIAL CONTRIBUTION OF DEMENTIA AND CHRONIC CONDITIONS TO HOSPITALIZATION, SNF ADMISSION
Heather Allore, Yale School of Medicine, New Haven, Connecticut, United States

We estimate the contribution for experiencing hospitalization, skilled nursing facility admission and mortality using a measure of attributable fraction that incorporates both the prevalence, incidence and risk called Longitudinal Extension of the Average Attributable Fraction (LE-AAF). We estimate the LE-AAF for Non-Hispanic whites and Non-Hispanic Blacks for dementia and 10 chronic conditions, for three outcomes. This approach analyses the temporal relationships among conditions to estimate their population-level average attributable fractions. Unlike standard measures of attributable fraction, the sum of the contribution of each condition based on the LE-AAF will not exceed 100 percent, enabling us to compute the contribution of pairs, triads or any combination of conditions. Furthermore, in studying multimorbidity, the LE-AAF has the desirable feature of being based on all combinations of the risk factors and covariates present in the data with final values for the individual LE-AAFs obtained by averaging across these observed combinations of predictors.

DISPARITIES IN DISEASE-SPECIFIC REMAINING LIFE EXPECTANCY AMONG MEDICARE BENEFICIARIES IN THE UNITED STATES
Julia Kravchenko, Duke University, Durham, North Carolina, United States, 2. Duke University, Duke University/Durham, North Carolina, United States

Racial and geographic disparities in life expectancy (LE) in the US are a persistent problem. We used 5% Medicare Claims for 2000-2017 to investigate the patterns of remaining LE (RLE) in the US. With the highest and the lowest LE. RLEs in race/ethnicity specific populations aged 65+ were calculated in patients with specific diseases and in the total population using the area under the Kaplan-Meier estimator. The Cox model was used to investigate the effect of state-specific residence on total LE and RLE. Between-the-states differences in RLE were most pronounced for cerebrovascular disease, atherosclerotic heart disease, breast and prostate cancer. RLE was the lowest for lung cancer and sepsis, followed by Alzheimer’s disease, dementia, pneumonia, and heart failure. RLE for myocardial infarction and cerebrovascular disease decreased over time, while for renal failure, diabetes, atherosclerotic heart disease, and cancers of breast and prostate RLE increased.

Session 3045 (Symposium)

EXPERIENCING THE COVID-19 PANDEMIC AT AGE 85 AND OVER: AN MIT AGELAB STUDY WITH THE 85+ LIFESTYLE LEADERS PANEL
Chair: Taylor Patskanick
Discussant: Lisa D’Ambrosio

The oldest of older adults remain at the highest risk of developing severe illness, requiring hospitalization, or dying if infected with COVID-19. As a result, the discourse about the COVID-19 pandemic has centered on short-term sacrifices to “protect” older adults. Yet much remains to be known