

additional indications. The IBM Watson artificial intelligence system was used to search 1.3 million Medline abstracts to prioritize medications that may be potentially disease-modifying in Parkinson's disease. We assessed patterns of use of the top 50 Watson-ranked drugs among 14,866 adults with Parkinson's disease aged 70 and older who were matched to persons without Parkinson's disease on age, sex, and comorbidity. Sociodemographic characteristics, chronic conditions, and use of other medications were compared using standardized differences. Patterns of potentially disease-modifying drug use were examined prior to and following ascertainment of Parkinson's disease. Preliminary findings from multivariable conditional logistic regression models on the association between previous exposure to potentially disease-modifying drugs and Parkinson's disease diagnosis will be presented.

SESSION 560 (SYMPOSIUM)

PRODUCTIVE AND ACTIVE RURAL AGING: TOWARD CRITICAL PERSPECTIVES

Chair: Mark Skinner, *Trent University, Peterborough, Ontario, Canada*

Co-Chair: Rachel Winterton, *La Trobe University, Bendigo, Victoria, Australia*

Discussant: Kieran Walsh, *NUI Galway, Galway, Ireland, Ireland*

Despite global trends in rural population ageing, relatively little attention within research and policy has been directed to understanding what it means for rural people, communities and institutions to be at the forefront of twenty-first century demographic change. To build understanding of rural ageing, this symposium draws together papers from four countries to provide insights in the gaps in rural ageing research – specifically the in context of productive and active rural ageing by examining rural work, retirement and volunteering through the critical perspectives of citizenship, contestation and complexity. Winterton and Warburton will explore how active citizenship trends among rural older adults support or hinder the capacity of rural settings to support health ageing. Colibaba and Skinner will discuss the contestation of rural ageing by examining a volunteer-based rural library and the emergent 'contested spaces of older voluntarism' whereby older volunteer negotiate their rights and responsibilities associated with ageing and volunteering in rural communities. Duvvury and Ni Leime will examine the interactions between the twin phenomena of feminisation of agriculture and the feminisation of ageing in the consequent implications for rural women's work and retirement. Skinner and Joseph offer a critical perspective on voluntarism in ageing rural communities by examining volunteer leadership biographies as another means of understanding the contribution of older rural adults.

CRITICAL PERSPECTIVES ON VOLUNTARISM IN AGING RURAL COMMUNITIES: VOLUNTEER LEADERSHIP BIOGRAPHIES

Mark Skinner¹ Alun Joseph², *1. Trent University, Peterborough, Ontario, Canada, 2. University Of Guelph, Guelph, Ontario, Canada*

Voluntarism has been portrayed as a productive and even transformative process whereby rural communities, households and older residents are able to meet the challenges of changing rural demographics. Yet, little attention has been paid to building a critical perspective on the complex and often-contested expectations placed on older rural volunteers. This paper focuses on the particular gap in understanding the contributions of older rural adults as a crucial resource in creating opportunities for aging in place and sustainable rural community development. Drawing on research into voluntarism in Canada's aging resource communities, this paper presents qualitative findings from innovative 'volunteer leadership biographies' with older residents who were involved in key voluntary sector initiatives to improve community development. The findings show how older volunteer leadership is embedded in both place (residency) and time (life course), revealing new dimensions to the problem of understanding volunteer leadership in an era of rural population change.

DEFINING THE RELATIONSHIP BETWEEN ACTIVE CITIZENSHIP AND HEALTHY RURAL AGING: A CRITICAL APPROACH

Rachel Winterton¹, *1. La Trobe University, Bendigo, Victoria, Australia*

Active citizenship is romanticized in policy for its role in keeping older adults healthy, and rural communities sustainable. However, as proportions of older adults resident in rural communities continue to increase, the gerontological literature has begun to highlight challenges associated with both the capacity and desire of rural older adults to be active citizens. Through an integrative review of the international literature, this paper interrogates how active citizenship trends among rural older adults support or hinder healthy aging in rural settings. Findings indicate that active citizenship among older adults can increase rural age-friendliness and facilitate individual wellbeing. However, practices associated with active citizenship among this cohort can disenfranchise certain groups of older adults, through reshaping societal norms relating to citizenship, age-friendliness and rurality. These findings indicate that programs designed to promote active citizenship must both consider, and account for, diverse capacities and desires for active citizenship among rural older adults.

RURAL LIBRARIES AS CONTESTED SPACES OF OLDER VOLUNTARISM IN AGING RURAL COMMUNITIES

Amber Colibaba,¹ and Mark Skinner¹, *1. Trent University, Peterborough, Ontario, Canada*

Recent efforts to better understand voluntarism as fundamental to how rural communities are meeting the challenges of population ageing have highlighted ageing rural volunteers, and the attendant burden of older voluntarism, as key issues for ageing in place of rural residents and ageing rural community sustainability. Drawing on a case study of a volunteer-based rural library in Ontario, Canada, this study examines the experiences of older volunteers, the challenges of sustaining volunteer programs, and the implications of older voluntarism for rural community development. Findings from interviews and focus groups with library volunteers, staff, board members and community stakeholders demonstrate

how the experiences of older volunteers and challenges of older voluntarism affect rural community development. The results reveal how participation, well-being, conflict and territoriality associated with older voluntarism contributes to 'contested spaces of older voluntarism' whereby older volunteers negotiate their rights and responsibilities associated with ageing and volunteering in rural communities.

RURAL WOMEN AND AGING: IMPLICATIONS FOR WORK AND RETIREMENT OF OLDER WOMEN

Aine Ni Leime,¹ Nata Duvvury,¹ and Tanya Watson,¹
1. *National University of Ireland, Galway, Galway, Galway, Ireland*

At least half of the world's female population live in rural areas, and many are ageing. For these rural women, agriculture and informal rural livelihoods are the primary sources of employment, posing critical challenges for them with regard to work and retirement. This paper focuses on the interaction between the twin phenomena of the feminisation of agriculture and the feminisation of ageing and the consequent implications for rural women's work and retirement. Drawing on qualitative interviews and focus groups with 48 older rural Irish women, the paper establishes the 'invisibility' of women's economic contribution in agriculture, limiting their pension accumulation and constraining their retirement planning. The study found that even women property owners, and designated 'farmers', had uncertainty about their pension or retirement income. A key conclusion is that rural women's pension rights are still not guaranteed posing increased risk of economic insecurity and wellbeing for older rural women.

SESSION 565 (PAPER)

RISKS OF FALLS AND INJURY

CHRONIC PAIN, FEAR OF FALLING, AND RESTRICTED ACTIVITY DAYS IN AN OLDER POPULATION

Suzanne Leveille,¹ 1. *University of Massachusetts Boston, Boston, Massachusetts, United States*

Both chronic pain and fear of falling can lead to activity restriction and increased fall risk among vulnerable elders. Little is known about pain characteristics that may be associated with fear of falling, contributing to restricted activity. We studied 765 adults aged ≥ 65 y (mean=78.9y) in the MOBILIZE Boston Study, to evaluate the cross-sectional relationship between pain characteristics and fear of falling measured using the Falls Efficacy Scale (FES). In addition, we examined the impact of pain and fear of falling on restricted activity. We measured 3 domains of global pain: pain distribution (none, single site or multisite pain), and Brief Pain Inventory subscales of pain severity and pain interference. Restricted activity days (RADs) refer to the count of self-reported days of reduced activity due to illness or injury in the previous 12 months. We performed multivariable logistic regressions predicting fear of falling (FES<90/100) adjusted for sociodemographics, fall history and fall risk factors. Participants with multisite pain or moderate-to-high pain interference ratings were more likely to have fear of falling (adj. OR 1.97, 95%CI 1.05-3.67; adj.OR 4.02, 95%CI 2.0-8.06, respectively). Pain severity was not associated with FES. Older

adults with multisite pain and fear of falling reported significantly more RADs than those with multisite pain without fear of falling (79 \pm 135 and 26 \pm 74 RADs, respectively; test for pain x FES interaction, $p=0.01$). Older adults with chronic pain have greater fear of falling which may contribute to restricted activity. Efforts are needed to increase activity and falls efficacy among older adults with chronic pain.

CROSS-SECTIONAL ASSOCIATION OF FALLS AND POST-TRAUMATIC STRESS IN CANADIANS ACROSS LEVELS OF FRAILITY

Olga Theou¹ Mario Ulises Pérez-Zepeda²
Joshua Armstrong³ Judith Godin⁴ Melissa Andrew,¹
Susan Kirkland,¹ and Kenneth Rockwood¹, 1. *Dalhousie University, Halifax, Nova Scotia, Canada*, 2. *Instituto Nacional de Geriatria, Ciudad de Mexico, Mexico*, 3. *Lakehead University, Thunder Bay, Ontario, Canada*, 4. *Division of Geriatric Medicine, Dalhousie University & Nova Scotia Health Authority, Halifax, Nova Scotia, Canada*

Frail older adults are vulnerable to stressors and are more likely to experience adverse outcomes. Post-traumatic stress is common in older adults, and can be related to common adverse outcomes, such as falls. We examined whether falls are associated with post-traumatic stress in middle-aged and older Canadians, by levels of frailty. We conducted cross-sectional analysis of the baseline assessment of the Canadian Longitudinal Study on Aging's tracking cohort, comprising 21,241 individuals, aged 45 to 85 years. We constructed a 60-item frailty index (FI) and defined post-traumatic stress using the primary care post-traumatic stress disorder four-item tool (score 3 as the cut-point). Logistic regressions with post-traumatic stress as the dependent variable and at least one fall in the past year as the independent variable, were adjusted for socio-demographic variables and stratified according to FI 0.1 groups. Prevalence of post-traumatic stress and falls was of 6.5% and 5.0%, respectively for the whole sample. Among those who did not fall prevalence of post-traumatic stress ranged across frailty levels from 3.2% (FI<0.1) to 24.5% (FI \geq 0.3). Among those who fell, post-traumatic stress ranged from 3.4% (FI<0.1) to 36.9% (FI \geq 0.3). Falls were not significantly associated with post-traumatic stress among people who had an FI<0.3, but among those with an FI \geq 0.3 the odds ratio for having post-traumatic stress for those who fell was 2.25 (95% CI 1.2-4.23, $p=0.011$) compared to non-fallers. In conclusion, high levels of frailty can impact how a stressor, such as a fall, can be associated with an adverse psychological outcome.

EFFECT OF A HOME-BASED EXERCISE PROGRAM ON SUBSEQUENT FALLS IN SENIORS AFTER A FALL: A RANDOMIZED CLINICAL TRIAL

Teresa Liu-Ambrose¹ Jennifer C. Davis² John R. Best,¹
Larry Dian³ Wendy Cook⁴ Kenneth Madden⁵
Chun Liang Hsu⁶ and Karim M Khan⁷, 1. *University of British Columbia, Vancouver, British Columbia, Canada*, 2. *University of British Columbia - Okanagan Campus, Kelowna, British Columbia, Canada*, 3. *Department of Medicine, Division of Geriatric Medicine, Faculty of Medicine, University of British Columbia, British Columbia, Canada*, 4. *Division of Geriatric Medicine, University of British Columbia, Vancouver, Canada*, 5. *Gerontology*