Aging in Rural Canada: A Retrospective and Review*

Norah Keating, Jennifer Swindle, and Stephanie Fletcher
University of Alberta

RÉSUMÉ:
La recherche sur le vieillissement en milieu rural s'est développée considérablement depuis la publication du livre, *Aging in Rural Canada* (Butterworths, 1991). Le but de cet article est double : de fournir une rétrospective sur les questions de viellissement en milieu rural tirée de ce livre, et une revue de la littérature canadienne sur le vieillissement en milieu rural depuis sa publication. L'examen met en évidence les nouvelles orientations dans les définitions conceptuelles du « rural », et dans les questions de l'engagement social, l'indépendance, les réseaux familiaux et sociaux et les services ruraux et la santé. Deux perspectives principales de recherche sont évidents. Le point de vue ou l'optique d'analyse de la marginalisation se concentre sur les personnes âgées en milieu rural ayant des problèmes de santé, mais n'a pas inclus celles qui sont marginalisées par la pauvrété ou le sexe. L'optique d'analyse du vieillissement sain se concentre sur les contributions et l'engagement, mais a omis la recherche sur les relations sociales et la qualité de l'interaction familiale. Le rapport comprend un appel s'interroger sur l'interaction entre les gens et leur lieu de vie et à comprendre les enjeux de la diversité en milieu rural et le processus de vieillissement en milieu rural.

ABSTRACT
Research on rural aging has developed considerably since publication of the book *Aging in Rural Canada* (Butterworths, 1991). The purpose of this article is twofold: to provide a retrospective on issues in rural aging from this book, and to review Canadian literature on rural aging since its publication. The review highlights new directions in conceptual definitions of *rural*, and in issues of social engagement, independence, family and social networks, and rural services and health. Two main research lenses are evident. The marginalization lens focuses on rural seniors with health problems, but has not included those marginalized by poverty or gender. The aging-well lens focuses on contributions and engagement, but has omitted research on social relationships and quality of family interaction. The report includes a call for interrogation about interaction between people and place, and for understanding issues of rural diversity and processes of rural aging.

* Our thanks to Dr. Barry McPherson whose vision for a series of books on aging in Canada led to the first comprehensive accounting of aging in Canada; and to Dr. Herb Northcott for creating an opportunity to revisit and update these foundational pieces.

Manuscript received: / manuscrit reçu : 26/06/10

Manuscript accepted: / manuscrit accepté : 09/05/11

Mots clés : rural, vieillissement, Canada

Keywords: rural, aging, Canada

Correspondence and requests for offprints should be sent to / La correspondance et les demandes de tirés-à-part doivent être adressées à:
Dr. Norah Keating
Professor
Department of Human Ecology
University of Alberta
Edmonton, AB T6G 2N1
(Norah.keating@ualberta.ca)

In his preface to *Aging in Rural Canada*, Barry McPherson observed, "Compared to those who live in an urban community, we know very little about the rural elderly or about aging in a rural community" (Keating, 1991, p. vii). The book provided an opportunity to highlight the nascent research on the social conditions of growing older in rural Canada. Its goal was to highlight issues of special relevance to rural Canada, to raise critical questions about rural aging, and to provide a platform for researchers to develop a research lens with

doi:10.1017/S0714980811000250

which to understand the complexities of aging in rural settings.

The purpose of this paper is to review contemporary research on rural aging within the context of the issues and challenges raised in *Aging in Rural Canada*. Results of this review reveal the great strides made by Canadian scholars in closing knowledge gaps and in addressing emerging issues arising from population aging and rural transformation in Canada.

Methodological Approach

Our review of research on aging in rural Canada consists of two elements. The first part of the review is a summary of the six chapters in the Butterworths book. Objectives of the summary were to provide an overview of the state of knowledge in 1990. The second element is a systematic scoping review of research on rural aging research conducted since the publication of *Aging in Rural Canada*. A scoping review aims to map the key concepts underpinning a research area and the main sources and types of evidence available (Arskey & O'Malley, 2005). It is conducted to examine the extent, range, and nature of research in a particular field and produce a profile of the existing literature (Brien, Lorenzetti, Lewis, Kennedy, & Ghali, 2010).

To provide the most comprehensive assessment of recent research, several approaches were taken. A beginning point was to contact scholars across the country known for their research in rural aging. Authors were asked to send lists of their publications on rural aging, and the names of other authors who should be contacted. A set of publications by more than 30 key authors in this field was developed through this approach. The majority of these researchers responded to this initial call for publications on aging in rural Canada; a search of the literature published by non-respondent authors was conducted to fill remaining gaps. An additional source of information was an annotated bibliography on aging in rural Canada developed by Strain and Dobbs (2007), which is a comprehensive documentation of books, articles, reports, and academic theses and dissertations published between 1985 and 2005.

To augment these sources, an online literature search was conducted. A variety of keywords was selected to facilitate the search for relevant literature: rural, non-urban, non-metropolitan, remote, small town, rural population, seniors, older adults, aging, aged, elder, frail elderly, retirement, migration, and Canada. These keywords were used to conduct literature searches using search engines such as AgeLine, Abstracts in Social Gerontology, CINAHL (Cumulative Index to Nursing and Allied Health Literature), PubMed, and the British Columbia Aging Research database. This database search was useful in locating literature on rural aging in Canada by both Canadian and non-Canadian authors. Specific searches also were undertaken of scholarly journals such as *Canadian Journal on Aging*, *Canadian Journal of Rural Medicine*, *The Canadian Geographer*, *Canadian Journal of Nursing Research*, *Canadian Journal of Clinical Pharmacology*, *Canadian Journal of Community Mental Health*, *Canadian Woman Studies*, *Geriatrics Today: Journal of the Canadian Geriatrics Society*, and *Canadian Journal of Public Health*. Given the multi- and interdisciplinary nature of the field, literature was recovered from the disciplines of nursing, medicine, sociology, geography, psychology, gerontology, social work, and human ecology.

A number of inclusion criteria were used to determine which publications would be included in our review of the current state of knowledge on aging in rural Canada. These were as follows:

- *Peer-reviewed books and journal articles*. The "grey literature", unpublished doctoral dissertations, and conference proceedings were excluded because of issues of research quality and uneven access to these documents.
- *Research on rural aging in Canada*. Since the goal was to update our state of knowledge of aging in rural Canada, research conducted in other countries was not included.
- *Research published in the past decade*. Strain and Dobbs' (2007) annotated bibliography of rural aging provides a comprehensive listing of publications from the 1990s. Given this resource, and the relatively high volume of publications from 2000 onward, a decision was made to review literature from 2000 to 2010.
- *Research on social and health aspects of aging*. In keeping with the scope of the literature included in *Aging in Rural Canada*, our review excluded research on basic and biomedical aspects of aging.

Aging in Rural Canada: Looking Back

Aging in Rural Canada was written at a time when research on rural aging was in its infancy. Aging of the rural countryside had not yet gained the attention of gerontologists, and there was little research on many topics relevant to aging in rural settings, as well as little theoretical development. Despite Canada's long-standing rural tradition, there had been limited attention paid to definitions of "rural". The book's six chapters dealt with topics relevant to gerontologists and rural researchers of that time.

In chapter 1, a historic, cultural, and demographic overview of occupations and people in Canada framed discussion of older adults within the ideological, occupational, and geographic heritage of rural Canada. At that time, occupation, population density, and beliefs about rural life formed the basis for the definition of "rural", although occupational definitions predominated.

https://doi.org/10.1017/S0714980811000250 Published online by Cambridge University Press

In 1990, Canada's definition for what was rural was still founded on economic activity in agriculture. The chapter reflected this definition and the related discourse around ideologies of hard work and productive activity. Extant literature reflected the belief in a singular rural ideology, developed from three factors: early European settlement, the challenges inherent in geographic isolation, and the need to control the natural environment through "breaking the land". Distance from urban centres had not yet been formalized, and terms such as "remote rural" were just beginning to enter the lexicon. There had been no research on areas that were remote because of cultural distinctiveness, or on areas bypassed by economic development. This rural ideology encompassed a hard-working, stoic approach to life and strong family ties which were fundamental to survival.

Patterns of work, retirement, and leisure in rural areas were the focus of chapter 2. Findings from the small amount of research showed that older adults faced special challenges compared to those in urban areas. Rural women experienced community sanctions against off-farm employment and restricted access to jobs given the small service industry in rural areas. For older men not involved in farming, employment barriers resulted from resource industries hiring mostly young people. As a result of these employment barriers combined with low rates of access to workplace pensions, rural poverty among older adults was prevalent. Lower proportions of rural compared to urban retirees considered their retirement incomes to be adequate.

Reflecting the agricultural focus of rural life, the only Canadian research on rural retirement was on exit from farming – a lengthy process of withdrawal from the business contingent upon the availability of a (male) family successor and the ability of the farm to support two generations. There was a call for further exploration of business, personal, and family interrelationships in the study of rural retirement. Little information existed on residential mobility although researchers were aware of a new phenomenon in which recent retirees migrated from urban to rural settings. Despite strong rural beliefs about the importance of work, there was virtually no research on the importance of rural environments in determining patterns of work and retirement.

Research on leisure activities was considered in light of the assumption that leisure was devalued among rural residents who held traditional rural beliefs about the value of hard work. Findings from case studies of seniors in remote areas showed low levels of involvement in organized leisure activities, resulting primarily from lack of availability of organized leisure. Identified knowledge gaps included a need to better understand meanings of leisure and the nature of leisure involvement among older rural residents.

Seniors' independence was just emerging as an important construct. Chapter 3 of the book was organized around a response to a statement by the National Advisory Council on Aging (1989) that the main principle in care of the elderly should be to facilitate independent living in their communities for as long as possible. Although independent living was a goal, there were no comprehensive definitions of independence. Three principles of independent living were used as a basis for reviewing existing literature on independence of older rural adults. These were maintaining control over one's home environment, being integrated into the community, and having access to basic services.

Researchers highlighted a particular rural tension. Older rural adults placed high value on independent living, yet independence was made difficult by challenging rural environments. Compared to urban seniors, rural seniors lived in older houses with fewer amenities, and were concerned about high costs of home maintenance. Early research on supportive services highlighted a dilemma of poor service availability juxtaposed against strong community attachment and a disinclination to relocate even in the face of health problems. Seniors living in remote areas were at risk of placement in residential care as the only service option.

The conclusion in chapter 3 was that seniors' wish to remain at home had been substantiated and needed no further investigation. However, there were a number of key knowledge gaps. They included knowledge of what aspects of the physical environment might enhance older rural seniors' sense of control over the home environment, better data on the unmet needs of rural seniors, and enhanced understanding of the ways in which older adults defined independence.

The main assumption addressed in chapter 4 was that rural elders were embedded in extended, supportive families whose members are connected to one another through work and a common feeling of closeness to the land. The evidence was that most contemporary rural seniors lived in nuclear households despite a historic pattern of large extended families in which at least one unmarried child lived at home. There were no consistent rural-urban differences in family network size, although rural seniors believed that their families were more conveniently situated regardless of distance. There had been no research on patterns of contact with family members or friends.

The review of research on rural family support was based on the distinction between ongoing supportive

https://doi.org/10.1017/S0714980811000250 Published online by Cambridge University Press

interactions among family and friends and care (assistance to individuals whose functional capacities are chronically impaired). There was some indication of a "generational stake" in family relationships in which reduced resources and power of older parents resulted in a greater need for the relationship with their children than their children had with them. Exceptions occurred in farming communities in which parents had more power because they owned the farm, and in economically depressed communities in the Maritimes where retired parents had Old Age Security and thus were relatively wealthy. Existing evidence pointed to considerable variation in caring relationships between parents and children, and the hypothesis that less intense relationships such as those with siblings had more potential for affection without obligation.

Canadian research on care to frail older adults showed that children provided most of the care to both rural and urban older adults. The majority of rural caregivers said that caregiving had affected their health and that they were unable to take a break. Difficulties were most severe in geographically and culturally remote communities where there was greater emphasis on the provision of family care despite burdens or inconvenience. The question of whether lack of formal services put pressure on family caregivers had not been addressed although there was evidence that seniors were relatively unconcerned about formal service availability.

Chapter 5 began with the following statement: "In addition to independence, good health is basic to a high quality of life for seniors. Yet rural elders are often seen as being in poorer health than their urban counterparts and as underserved by health services" (p. 79). There was limited evidence to support or negate this assumption. Statistics on chronic illness revealed little difference between rural and urban seniors, although self-rated health of rural seniors was relatively high. Qualitative studies of definitions of health of rural seniors indicated that a key element of good health was the ability to take part in desired activities.

Patterns of service use differed between rural and urban seniors and across rural areas. Rural seniors had less access to health care services and were less likely to visit health care professionals such as physicians or dentists. Those in remote areas were among the most poorly served. Despite these differences, expressed needs for health services did not always correspond to objective measures of service availability. Seniors in remote areas were least likely to express unmet service needs, perhaps because of a willingness to travel greater distances to services, or concern that an admission of illness might force a move to a residential care setting. There was much to be learned about the interrelationships among service availability, rural culture, and health beliefs of rural seniors.

The final chapter (chapter 6) was devoted to recommendations for research, policy, and service directions. The chapter included a call for reframing of rural definitions to reflect key research questions about rural seniors. Occupation was no longer seen as a primary criterion since a small and declining proportion of rural dwellers was involved in agriculture. In contrast, distance from service centres was becoming increasingly relevant in light of the aging of rural communities. There was a need for better understanding of rural ideologies from the perspective of rural seniors, and of rural values that placed older rural women outside of the structures of power and public status within rural communities.

The apparent paradox of rural elders' not seeing their lives as particularly problematic despite their apparent disadvantages was poorly understood. A recommended starting point in determining needs of rural seniors and best service delivery models was to take into account both service efficiency and efficacy in terms of rural seniors' goals. Little was known about the interface of family and formal support networks. Gaps included the development of a rural lens to address the heterogeneity of rural areas.

New Directions in Rural Aging

Since 1990 there has been tremendous growth in research on rural aging in Canada, an indication of the maturation of this area of research on aging. There have been numerous publications in this area, including three books focused exclusively on aging in rural Canada (Hodge, 2008; Keating, 2008; Kulig & Williams, 2011). New topics have been introduced and longstanding issues redefined. Researchers have used a broad set of methodological approaches including qualitative, quantitative, and mixed methods, reflecting both traditional and community-based approaches to understanding rural issues. In this section, Canadian research on issues in rural aging is reviewed, using the chapter titles from *Aging in Rural Canada* as the organizing framework. Trends are highlighted that illustrate increasing knowledge of diversity among older adults and their rural contexts.

Rural Roots

Since the publication of *Aging in Rural Canada*, approaches to definitions of "rural" in Canada have evolved away from occupation in agriculture as a main component. Researchers have advised against the adoption of a standard definition of rural on the basis

of a belief that the definition of rural must derive from the requirements of the question being addressed (Dandy & Bollman, 2008; Havens et al., 2001). Most current definitions incorporate geographic elements of population size, density, and distance (Arbuthnot, Dawson, & Hansen-Ketchum, 2007; du Plessis, Beshiri, Bollman, & Clemenson, 2001).

To delineate rural from urban areas, many researchers use Statistics Canada's "rural and small town" definition: the population living in towns and municipalities outside the commuting zone of centres with a population of 10,000 or more (duPlessis et al., 2001). On the basis of this definition, researchers have begun to map the scope and diversity of rural communities. Canada now has approximately 3,000 rural communities. They have an average population size of 1,736, with 52 per cent having fewer than 1,000 residents. Average population density is 99 people per square kilometre, although almost one fifth of rural communities have a population density of one or fewer persons per square kilometre. Of those rural communities, 40 per cent are outside of commuting distance to an urban centre (Keating & Eales, 2011). There is increasing interest in these geographically remote places.

Canadian researchers have studied how each of these geographic elements can have an important influence on the lives of older adults. Population size can, for example, affect volunteer capacity and employment opportunities; population density influences access to neighbours and friends, and brings issues of transportation to the forefront (Keating & Phillips, 2008). Proximity to cities has become a defining characteristic of rural communities (Bryant & Joseph, 2001) and of issues of access to health and social services of older adults. The introduction of the concept, Metropolitan Influenced Zone (MIZ), has helped researchers better differentiate the social and economic influence of urban areas by virtue of the proportion of a rural community population that commutes to an urban centre. No MIZ exists when fewer than 40 percent of the residents in the community commutes to an urban centre for work. As increasing proportions of residents commute to an urban centre for work, the MIZ catogories change: in a weak MIZ, up to five per cent of residents commute; in a moderate MIZ, 5–30 per cent commute; and in a strong MIZ, 30–50 per cent commute (Statistics Canada, 2003). The terms "remote" and "isolated" now are used to distinguish rural communities that are long distances from urban centres. "Remote" describes a geographical area where a community is located over 350 km from the nearest service centre but has year-round road access. "Isolated" describes a geographical area that has scheduled flights and telephone services but is without year-round road access (Public Health Agency of Canada, 2009).

Increasingly, researchers also are using sociocultural definitions, based on an understanding of rural as a reflection of a set of attitudes, behaviours, and beliefs (Keating & Phillips, 2008). They argue that this lens is essential in understanding diversity in rural ideologies. In the past decade, such definitions have been used to explore the various relationships among the attitudes, needs, and values of older rural adults and the community settings in which they live (Keating, Keefe, & Dobbs, 2001; Kulig et al., 2008).

Work, Leisure, and Social Participation

Older adults' work, retirement, and leisure – and their ability to live independently – were two major areas of focus in *Aging in Rural Canada*. In recent years, there has been considerable reframing of these concepts by Canadian gerontologists. Bounded concepts of work, retirement, and leisure have been replaced with ideas of participation and productive activity that cut across employment/retirement and leisure/work divides. Meaningfulness of activities has become a central idea.

Issues related to employment, retirement, and leisure have not been part of the recent discourse on rural aging. There continues to be a large body of literature on farming, although it is focused on economic and production issues in agriculture. As well, there is literature on rural restructuring and on the economic exigencies experienced by rural communities bypassed by economic development (see, for example, Reimer, 2006). This research highlights the economic and employment difficulties of many rural communities but does not address the employment/unemployment or retirement experiences of older rural adults. Little is known about the situation of older workers, decisions made by older workers about the timing of retirement, or about the proportion of older rural adults who may have workplace pensions. There is recent research from the United States on migration of recent retirees to rural communities (Brown & Glasgow, 2008), but no such national perspectives in Canada.

Meaningful participation has become an important construct in the new conceptualizations of work and leisure activities. Meaningfulness is conceptualized as the congruence between personal preferences for engagement and the opportunities or constraints provided by rural settings (Keating & Phillips, 2008). Social participation is a dominant theme in the literature, with focus on the personal and environmental resources that facilitate this form of social connectedness. Participation encompasses unpaid work activities such as volunteering, helping others, membership in community organizations, and active leisure (Fast & de Jong Gierveld, 2008; Witcher, Holt, Spence, & O'Brien

Cousins, 2007). Employment has not been part of this area of investigation.

In their research on national profiles of participation of aging adults, Fast and de Jong Gierveld (2008) found that in comparison to urban residents, older rural adults belonged to more community organizations, and they spent more hours volunteering and providing personal help to others. Intense involvement in their communities was associated with a stronger sense of belonging but also with the risk of older adults' becoming "compulsory volunteers" because of the paucity of local services. Under such circumstances, the benefits of participation in the volunteer sector may be overshadowed by costs related to heavy time and financial commitments. Eales, Keefe, and Keating (2008) found that such risk was higher in economically deprived communities. In these situations, the main group of "community active" volunteers was older women who were unable to take a break from volunteering because few others were available to step in. There has been no broadly based research interest in these volunteer contributions of older women, pointing to the continued invisibility of their work.

There has been little recent research on leisure activity of older rural adults. Lack of focus on leisure may result in part from strong rural traditions related to productivity. Witcher et al. (2007) noted that some seniors have been socialized into a culture of physical labour during childhood during which leisure-time physical activities were at the periphery of acceptable societal norms. In their study of a fishing village in Newfoundland, the researchers found that older participants believed that leisure-time physical activity was not appropriate. Their key strategy for aging successfully involved "keeping busy" through "productive" activities such as woodworking, berry-picking, fishing, knitting, or sewing. Strain (2001) also illustrated age-related beliefs that affect leisure participation. She found stigma associated with participation in seniors' centres that were for "old people". In contrast, both Cloutier-Fisher and Harvey (2009) and Eales and colleagues (2008) found that recent arrivals to retirement communities embraced active leisure: they had been drawn to amenities such as golf courses and waterways with boating opportunities.

Research on how rural settings might have differential ability to foster social participation complements the new knowledge on variation in participation. Rozanova, Dosman, and de Jong Gierveld (2008) noted that rural communities benefit greatly from the contributions of older adults and rely on social participation to buttress service and public infrastructures. They reported on how communities foster or constrain participation in volunteering and in providing care to family members. Findings were that older adults spent more hours volunteering in communities that had higher proportions of older adults, more highly educated residents, and growing populations, characteristics typical of retirement communities. They provided more help to family and friends in communities that were more remote and economically less diversified. Volunteering was more strongly associated with community characteristics than was help to others which is grounded in interpersonal relationships.

At the more macro level, retrenchment of services in rural communities also affects social participation of older rural residents. Joseph and Cloutier-Fisher (2005) stated that rural communities historically have had lower levels of supportive services than dictated by national standards. These were further reduced in Ontario in the 1990s: the exclusion from the provincial funding envelope of volunteer-based community services such as Meals on Wheels, respite care, telephone reassurance, and friendly visiting perpetuated this systemic bias against rural communities. The researchers found that such retrenchment placed older adults with chronic health problems at increased risk of being "prisoners of space", confined to their homes by these severe restrictions in community resources. There exist pockets of resistance to these changes, however. Hemingway and MacLeod (2004) reported on a community-based capacity-building process in the Northern Interior Health Region of British Columbia. Older adults organized to present seniors' health issues to the health service delivery governing body and to develop strategies for continued involvement of senior volunteers in the implementation of health policy in their own communities.

The rethinking of the work/leisure dichotomy to encompass the broader concept of engagement has added considerably to our understanding of the productive activity, social participation, and motivations of older rural adults. Given the increasing interest in an aging workforce in Canada by public and private sector employers and policy makers, reinstituting a research focus on the paid work of older rural residents seems timely. The continued invisibility of women's paid and unpaid contributions to their communities requires redress.

Independent Living

Research on the independence of older rural adults has been developed in two distinct areas. In the first area research is focused on aging well, the re-creation of personal identity, and the ways in which older rural adults interact with their social and physical environments to maintain a sense of self in the face of changes as they grow older. In the second area, literature on

frailty and need for assistance has highlighted the ability to live at home without high levels of formal or family/friend assistance. Studies are reviewed that address the ability of service providers and family/friend caregivers to support older people with chronic health problems later in this article, in the section on health and health services.

Twenty years ago, the term "aging well" had not yet entered the lexicon. At that time the focus was on how, in rural settings, people can be helped to remain at home. Researchers increasingly are interested in issues related to quality of life that go beyond questions of maintenance (Chapman & Peace, 2008; Cloutier-Fisher & Harvey, 2009; Dobbs & Strain, 2008; Eales et al., 2008). Chapman (2009) has argued that aging well is an important construct because it moves gerontology away from a focus on dependency and frailty towards an emphasis on older adults' assets and abilities. She described aging well as an ongoing process of making sense of self amid later-life change. A central argument is that "throughout our lives the places in which we live reflect aspects of self. And we reflect those places" (Chapman & Peace, 2008, p. 21). Others agree that people and places influence each other (Cloutier-Fisher & Harvey, 2009; MacKenzie, 2001; MacKenzie & Cloutier-Fisher, 2004). Chapman (2009) reject the notion that there is a formula to aging well that consists of the "right" resources (like health, financial security, and social support) and "best" types of activities (e.g., productive and social activity), arguing that such prescriptive approaches negate the diversity in pathways towards a good old age.

In her research in rural communities in Canada, Chapman (2009; Chapman & Peace, 2008) studied the reciprocity between people and place of women who had grown old in harsh prairie farming communities. Despite the limitations of their environments, they chose to remain in place because that is where their sense of self, over time, is located (Chapman & Peace, 2008). Cloutier-Fisher and Harvey (2009) concur in their study of a rural retirement setting involving both older women and men, the community defined the people with whom they identified and the place where they felt they belonged. The authors conclude that this reciprocity between people and place is connected to a sense of home and of self that develops through a process that connects past and future for individuals.

The nascent research on aging well in rural communities has great potential to increase understanding of the processes of aging and provide a counterpoint to the continuing strong focus on issues of frailty and dependence. Focusing on older workers could help address questions of productive activity that have strong links to financial resources and quality of life for older women and men.

Family and Social Networks

The research on rural families, social networks, support, and care remains a relatively small body of work in comparison to other research areas such as health. Two themes highlight the special importance of social relationships to older adults and to family and friends who care for them: these are the types of social contacts of older adults and the support needs of caregivers.

Recent evidence that daily and weekly contact with friends and siblings is more likely to occur in rural than urban areas, and that contact with family and friends can decrease loneliness, provides some credence to the assumption that rural seniors are embedded in strong social networks (Miedema & Tatemichi, 2003). Yet, in their literature review on social support of rural seniors, Clark and Leipert (2007) note evidence of support eroding as a result of outmigration of young people, geographic distance among network members, and decreased income of older adults in bypassed rural communities.

In response to concern about the erosion of support networks, researchers have begun to shift their attention to the potential for social isolation arising from the quality and quantity of individuals' social contacts with family and friends. For example, Cloutier-Fisher and Kobayashi (2009) have delineated individual and contextual factors that influence social isolation. Individual predictors include the following: living alone; having low life satisfaction; having low income; being male; being widowed, separated, divorced, or single; having poor self-rated health; and experiencing a decline in cognition and health. Contextual factors arise from geographic distance and community tenure. Those living far from relatives and who have lived a short time in their communities are more likely to be isolated (Havens, Hall, Sylvestre, & Jivan, 2004; Kobayashi, Cloutier-Fisher, & Roth, 2009). Stoic older adults are at particular risk because of their self-reliance, practicality, and focus on work. Eales et al. (2008) found that such older adults have limited social networks, eschew opportunities to be engaged socially, and have little interest in community participation.

There also are gender differences in risk factors for social isolation. Kobayashi et al. (2009) found that rural older men had smaller support networks and lower utilization rates of health and services, whereas rural women used more services and support from family and friends. The authors conclude that geographic and gender differences require targeted programs to help individuals sustain or enhance social integration.

https://doi.org/10.1017/S0714980811000250 Published online by Cambridge University Press

Some researchers have evaluated intervention programs to reduce isolation. Blake and Cloutier-Fisher (2009) evaluated a backyard garden-sharing project, while Cloutier-Fisher and Kusch (2009) evaluated a congregate dining program. Each set of authors found that programs that increase social connections enhance the potential for supportive exchanges.

Corresponding to the high level of concern about age-related chronic illness and disability, there is continued interest in family/friend caregiving. Caregivers included family members (Bédard, Koivuranta, & Stuckey, 2004; Morgan, Semchuk, Stewart, & D'Arcy, 2002) and older adults themselves (Hayward, Davies, Robb, Denton, & Auton, 2004; Hubley, Hemingway, & Michalos, 2003). There was no research on non-kin caregivers such as friends and neighbours.

Rural caregivers find caregiving difficult in ways that are unique to their rural settings. Bédard and colleagues (2004) found that compared to their urban counterparts, rural caregivers caring for relatives with dementia had access to fewer formal supports and were more reliant on support from family and friends. Rural caregivers did not report greater burden or poorer health status than urban caregivers, a finding that is puzzling given the lack of resources for caregivers and the low uptake of those services that are available. Morgan and colleagues (2002) found similar gaps in caregiver support. In focus groups with home care staff and family members caring for individuals with dementia, the researchers found low use of support services because of financial barriers, and services that were unacceptable or unreliable. Married older caregivers in rural communities in northern British Columbia reported less satisfaction with relationships with their spouse and feeling mentally older than non-caregivers (Hubley et al., 2003) – negative experiences that may not be addressed with the usual set of community services. Similar results were found in Racher's (2002) study of frail rural older couples, which showed a continuum of spousal relationships, from mutually supportive to very fragile and unbalanced.

Caregivers in remote areas face particular challenges related to isolation and loneliness. Chappell, Schroeder, and Gibbens (2008) report on research designed to understand the situation of caregivers in isolated communities in Nova Scotia, Newfoundland and Labrador, and Inuit communities in the Arctic. Small isolated populations, severe winters, non-existent community programs, lack of community facilities in which to meet with others, and costly travel for services were major concerns. Community members found that raising awareness of the support needs of caregivers through radio, posters, and T-shirts for caregivers helped caregivers and community members better appreciate their caregiving work.

Researchers also have addressed the assumption that relationships with social network members are positive. Brozowski and Hall (2003) found that seven per cent of the older rural respondents to Statistics Canada's 1999 General Social Survey on victimization had experienced emotional or financial abuse by a child, caregiver, or partner/ex-partner. Interventions to support those experiencing such abuse are hampered by lack of professional resources in rural communities; by cultural norms of privacy, family integrity, and stoicism; and by perceived usefulness of help to abused individuals (Harbison, Coughlan, Karabanow, & Vander-Plaat, 2004, 2005; Stones & Bédard, 2002). These findings indicate that approaches to address elder abuse in rural communities need to be different than those used in urban locations. Increased attention to the variety of family relationships would set these difficult relationships within the context of ongoing family interactions and their inherent tensions and areas of supportiveness. Gaps remain in our knowledge of which older adults are embedded in supportive relationships, how those relationships evolve, and who is likely to be without ongoing support or care if needed.

Health

In recent years, health has dominated the rural aging research agenda. Of the documents retrieved for this article, two thirds fell under the topic of health. Research was in two broad areas: health status including physical and mental health; and restructuring, availability, and utilization of rural services.

Health Services

Researchers have addressed key questions raised in *Aging in Rural Canada* about whether rural seniors are in poorer health than their urban counterparts and underserved by health services. At the aggregate level, residents of rural and remote areas continue to experience poorer health than their urban counterparts (Allison & Hemingway, 2009; Davenport, Rathwell, & Rosenberg, 2005). In a study of trends in the health status of older adults in Manitoba, Menec, Lix, and MacWilliam (2005) found that chronic diseases were on the rise in both rural and urban areas, with increasing prevalence of diabetes, hypertension, and dementia. The risk of cancer deaths increased significantly in rural areas. Rural seniors have a moderate risk of falls (Payne, Perkin, & Payne, 2003; Yiannakoulias et al., 2003) with hospital admissions for hip fractures increasing in rural areas (Menec et al., 2005). Older adults in rural areas have higher levels of activity limitations

https://doi.org/10.1017/S0714980811000250 Published online by Cambridge University Press

(Fast & de Jong Gierveld, 2008), and poor periodontal health (Sbaraglia, Turnbull, & Locker, 2002).

There has been advancement in understanding the sources of these differences, highlighting rural populations at particular risk of some chronic conditions. In rural settings, research on diabetes has concentrated on aboriginal populations which have a higher prevalence for both women and men than the Canadian population (Maberley, King, & Cruess, 2000; Patenaude, Tildesley, MacArthur, Voaklander, & Thommasen, 2005). High rates of obesity among rural seniors are considered an important causal factor of diabetes (Self, Birmingham, Elliott, Zhang, & Thommasen, 2005). In contrast, few rural-urban differences have been found in the prevalence of dementia (Strain, Blandford, & St. John, 2003) despite reports from rural and remote service providers of a growing prevalence of dementia in their practices (Morgan et al., 2009). Research on potential rural environmental risks (e.g., exposure to agricultural chemicals) for Alzheimer's disease and for some cancers failed to show a significant relationship (Brophy et al., 2002; Gauthiera et al., 2001).

Mental health issues are new to the rural aging research agenda and are of increasing concern (see, for example, McGee, Tuokko, MacCourt, & Donnelly, 2004; Bédard, Gibbons, & Dubois, 2007; Patten, Semak, & Russell, 2001). Among those aged 55 and older, rural adults report a higher proportion of mental distress (Karunanayake & Pahwa, 2009; Wang, 2004). No significant rural-urban differences in the presence of depressive symptoms have been found (St. John, Blandford, & Strain, 2006). However, in rural areas, predictors of depression are unique – living alone, inadequate income, having functional impairment, and occupational stressors related to financial viability and management of farming (Thurston, Blundell-Gosselin, & Rose, 2003). Such stressors related to rural environments along with high use of antidepressants (Patten et al., 2001) has heightened concern that rural communities are not equipped to meet the needs of rural seniors in terms of developing and delivering mental health services.

There also is evidence of improvement in some aspects of rural health of older adults. Risk of deaths due to cardiovascular disease, pneumonia, and influenza has declined. In Alberta, community-acquired pneumonia is still a common cause for hospital admission, although there are no rural-urban differences in hospitalization rates (Carriere, Yan, Marrie, Predy, & Johnson, 2004). Improvements are related to increased rates of influenza vaccinations in older adults, although vaccination rates are still considered suboptimal (Andrew, McNeil, Merry, & Rockwood, 2004; Russell & Maxwell, 2000).

Despite health disadvantages, rural seniors continue to be more satisfied with their health than those living in urban areas. This apparent incongruity is explained in part by more stoic approaches to health problems (Wanless, Mitchell, & Wister, 2010), and by beliefs that they have strong social networks to draw on if needed (St. John, Havens, van Ineveld, & Finlayson, 2002).

Availability of Community Services

There are continued disparities between the services available for seniors in urban versus rural areas, and many challenges in providing services in rural and remote regions (Davenport et al., 2005). There is particular concern about the impact of reduced government commitments and the rationalization of public services on rural communities already struggling with declining population numbers and provisioning capacity (Hanlon, Clasby, Halseth, & Pow, 2007; Skinner & Joseph, 2007).

In addressing questions of deficits in rural service availability, researchers have focused on structural issues at the provincial level where policies regulating the organization and delivery of services are developed. In Ontario, managed competition has had a profound impact. Based on market-oriented provision of services, managed competition has effectively displaced the voluntary sector in provision of long-term care (Cloutier-Fisher & Skinner, 2006). Long-term care practitioners increasingly are isolated, lack local knowledge and language, and work under pressure of shortages of health professionals (Skinner & Rosenberg, 2006). In rural British Columbia, health care restructuring has led to similar limitations in health services where small rural communities are hard-pressed to manage population aging in the face of such changes (Hanlon & Halseth, 2005). An emerging issue is the plight of resource towns that are aging rapidly. In their study of the evolution of Mackenzie, British Columbia, Hanlon and colleagues (2007) found that decades of workforce restructuring in the forest industry have transformed a community of young people into one with an aging workforce that has few resources for older workers or retirees.

As a result of restructuring, many rural hospital services have been reduced or eliminated, truncating access to emergency services, physicians, and pharmacies (Davenport et al., 2005; Houle, Salmoni, Pong, Laflamme, & Viverais-Dresler, 2001). Rural residents increasingly are without regular family physicians. For example, of the 15 per cent of Newfoundlanders who do not have a regular doctor, most (75%) are rural (Mathews & Edwards, 2004). Restructuring has increased dependency on over-burdened community groups, family members, and individual volunteers to meet the health and social support needs of older

residents (Skinner, 2008; Skinner & Joseph, 2007). There is concern that the ongoing exodus of younger family members seeking employment in urban areas along with volunteer shortages will place further pressure on informal systems that cannot compensate for lack of formal services for older people (Alcock, Angus, Diem, Gallagher, & Medves, 2002; Moore & Pacey, 2004; Skinner et al., 2008). However, evidence of in-migration of young people suggests that there may be some reversal of this trend (Moore & Pacey, 2004; Rothwell, Bollman, Tremblay, & Marshall, 2002).

Health system reforms have increased pressure on home care services already severely hampered in some regions by harsh weather conditions (Skinner, Yantzi, & Rosenberg, 2009). Low wages and difficult working conditions have made it difficult to recruit and retain home care workers (Davenport et al., 2005; Forbes & Edge, 2009; Leipert et al., 2007).

Palliative care is underdeveloped in rural areas (Robinson et al., 2009), and there has been a call for tailored approaches to address local concerns and priorities as urban-based policies that are scaled down do not always work in rural and remote areas (Crooks, Castleden, Schuurman, & Hanlon, 2009; Lau et al., 2007; Robinson, Pesut, & Bottorff, 2010). These include settings that are nearby and accessible by family/friend caregivers (Castleden, Crooks, Schuurman, & Hanlon, 2010), and hope-fostering strategies with palliative care patients (Duggleby & Wright 2004, 2005).

Service Utilization

Patterns of service utilization reflect longstanding rural-urban disparities, heightened by restructuring. In comparison to urban seniors, older rural adults have fewer visits to general practitioners, specialists, or dentists than do urban residents (Allan & Cloutier-Fisher, 2006; McDonald & Conde, 2010). They are more likely to use emergency rooms (Harris, Bombin, Chi, deBortoli, & Long, 2004), to be admitted to hospital (De Coster, Bruce, & Kozyrskyi, 2005), and to live in residential continuing care settings such as nursing homes. In a study of emergency room use in a rural community in Northern Ontario, Harris and colleagues (2004) found that higher use compared to urban residents resulted from a lack of rural physicians for primary care. Longer hospital stays are due to the greater bed supply in rural areas and a greater willingness of physicians to keep older adults in hospital (Finlayson, Lix, Finlayson, & Fong, 2005). Findings from a case study of two rural towns in Ontario illustrated these utilization patterns. Cloutier-Fisher and Joseph (2000) found strong beliefs among service providers and users that "the restructuring of publicly-funded community services, combined with a substantial re-investment in long-term care facilities ... make some elderly people more vulnerable to institutionalization" (p. 1037).

There has been less research on the utilization of community services such as mental health clinics, day centres, day hospitals, nursing home respite programs, and palliative care. Lack of research may reflect the paucity of services in some rural and remote areas. However, researchers in British Columbia and Manitoba also have found that geographic isolation, harsh climates that made travel difficult, lack of knowledge about community services, and the stigma related to the use of mental health services accounted for these patterns (Ritchie, 2003; Strain & Blandford, 2002).

Solutions to Rural Program Deficits

Consistent findings of deficits in service availability and access have led to research on possible approaches to meeting the service needs of older rural adults. These include increasing the availability of health care professionals, using telehealth and other technologies, relying on the voluntary sector, and enhancing community health resources.

Under-utilization of physician, nursing, and specialist services results from difficulties in recruiting and maintaining health professionals. Difficulties with physician recruitment have been addressed in part through reliance on gerontological advanced practice nurses who provide expert coaching and guidance, consultation with rural physicians, and collaboration in providing care to older persons in rural long-term care facilities. Higuchi, Hagen, Brown, and Zieber (2006) found that service from these professionals helped improve resident care, prevent unnecessary hospitalization, and enhance preventive approaches. However, there also is a shortage of rural nurses resulting from retirement of older nurses and difficulty recruiting younger professionals (Stewart et al., 2005). Job satisfaction is important to recruitment and retention, and it is closely related to community attachment (Andrews et al., 2005; Penz et al., 2007; Penz, Stewart, D'Arcy, & Morgan, 2008; Stewart et al., 2005). Kulig and colleagues (2009) found that nurses who grew up in rural communities were more satisfied with their current community. In particular, about 40 per cent of aboriginal nurses return to their home communities to work (Kulig et al., 2006).

The use of information and communication technology to deliver health services, known as telehealth (McBain & Morgan, 2006), has promise for reducing service deficits in rural and remote communities. Availability is not widespread, but early results are encouraging. For example, Gorman, MacKnight, and Rockwood (2004) assessed the effectiveness of telemedicine for a

https://doi.org/10.1017/S0714980811000250 Published online by Cambridge University Press

geriatric outreach program that assessed older adults for cognitive impairment. Based on a result of an 80 per cent satisfaction rate among patients, they conclude that teleconsultation is a useful addition to the delivery of health care in rural areas. Information technology also has potential to assist rural residents with health information searches. At present, computer ownership and Internet connectivity are low for older rural adults. However, those in higher income provinces (Alberta, Ontario, and British Columbia) are more likely to be connected to the Internet, and rural Internet connectivity is increasing with time (McLaren, 2002).

There has been some tracking of local efforts by non-profit organizations, community groups, family members, and individual volunteers who have taken actions to sustain rural services (Skinner, 2008; Skinner & Joseph, 2007). Such efforts involve networking with community groups and other providers serving rural areas to create solidarity in the face of structural changes like rationalization of services and resources (Skinner & Joseph, 2009). These groups endorse the notion of being free to do what works in their communities, without constraints of practice or policy guidelines developed for urban centres (McKee, Kelley, & Guirguis-Younger, 2007). Skinner and Joseph (2007) caution against relying on local volunteers caught between the demands of restructuring and declining community resources. According to Skinner (2008, p. 202), "Resolving this paradox is an immediate challenge for health and social policy in restructuring societies like Canada and elsewhere."

One solution to meeting the long-term care needs of rural older adults has been to find new ways of allocating resources. In the past, institutional funding has been tied to spending (i.e., the number of beds and hours of care). Suggestions to better meet the needs of rural communities include basing the funding system on the functional autonomy of residents (Tousignant, Hebert, Dubuc, Simoneau, & Dieleman, 2003); and reallocating some funding from residential care to adult day and night support programs, and to convalescent beds. The development of separate dementia care units within rural nursing homes has been proposed to improve the physical and social environments of residents (Morgan, Semchuck, Stewart, & D'Arcy, 2003; Morgan, Stewart, D'Arcy, & Cammer, 2002; Morgan, Stewart, D'Arcy, Forbes, & Lawson, 2005; Morgan, Stewart, D'Arcy, & Werezak, 2004).

Conclusions

As in other areas of aging in Canada, rural aging research has expanded and matured. There is a growing cohort of Canadian scholars in rural aging from social and health sciences including human geography, nursing, human ecology, rehabilitation medicine, and sociology. Together, their work provides a solid basis from which to conduct further theoretical and empirical work on processes of rural aging.

Since the publication of *Aging in Rural Canada*, conceptual development of constructs of "rural" has become more nuanced and complex. Geographic definitions that include population size, and density and distance from urban areas, have taken pre-eminence. Each has been foundational in the extensive exploration of the difficulties inherent in service delivery to older adults. The further delineation of distance into "remote" and "isolated" warrants investigation to validate relevance of having two terms. Does the profound isolation of communities with only winter road access shape experiences of older residents in ways that are unlike experiences in regions in which access is possible though at great cost? Do the two terms help in delineating experiences of aging across the variety of rural settings, thus adding to understanding of rural diversity?

Occupational approaches to understanding 'rural' have virtually disappeared – an appropriate change given the dwindling proportions of rural residents involved in farming. Yet one wonders if there is any relationship between a movement away from understanding work as a driving force in rural Canada, and the dearth of research on older workers, employment, and retirement. Although sociocultural definitions of rural have been further articulated, there has been less research positioned at the interface of rural ideologies and rural places. There are hints of increasing variation in rural ideologies. The stoic approach to hard work and indications of engagement in productive activities are reminiscent of the singular rural ideology articulated in *Aging in Rural Canada*. In contrast are beliefs among in-migrants that rural settings are places to play. Further work is needed to link sociocultural to geographic definitions in order to provide a basis for better understanding the interface between older people's rural beliefs and the physicality of the places in which they live.

The publications reviewed here reflect two lenses in rural aging. The first is on older adults who are at risk because they lack personal or community resources to meet their needs. Almost all of the research using this lens has been of risk experienced by rural seniors who lack good health and social services, and who have health problems that may be exacerbated by rural settings. There has been great progress in articulating structural issues that mitigate against solutions to these seemly intractable problems. This body of research is particularly important in highlighting the needs of

https://doi.org/10.1017/S0714980811000250 Published online by Cambridge University Press

older adults who are most likely to be at risk because of poor health and lack of access to supportive services.

Other groups of older rural adults who are at risk should be included in this "marginalization lens." Research reviewed in *Aging in Rural Canada* showed tenuous labour force attachment, higher rates of poverty, and concerns about income adequacy. Twenty years later, the socio-economic status of older adults warrants updating. Lack of attention to employment of older workers, to processes of retirement, or to income security means that little is known about the extent of rural privation. Further, despite widespread belief that aging is gendered, there has been no systematic evaluation of the relationship between gender and marginalization. Questions such as whether older women in rural Canada experience the same levels of income inequality as do urban women – and whether there is a triple jeopardy of being old, female, and single – require exploration if we are to have a more complete understanding of rural disadvantage.

The second rural lens is focused on quality of life, independence, and social connections. The "aging well" lens reflects an interest in the contributions of older adults to their families and communities, and their ongoing engagement in creating their relationships to others and to their rural settings. There is increased understanding of aging in a rural place and in how place grounds personal identities.

The strength perspective of this body of research with its emphasis on contributions and resources of older persons is an important balance to the marginalization discourse that has been at the forefront of rural research in the past decade. Yet gaps in our understanding of aging well in rural Canada are evident. Most of the research on social connections has been from the perspective of care provided to older adults or is about strained relationships that result in abuse. Research on the quality and diversity of interactions among family members from an aging-well perspective would benefit from a critical analysis of the contemporary importance of distance from kin in the receipt *and* provision of support. The study of generational transfers of time and money resources from older adults to younger family members needs to be expanded to rural settings. If one of the goals of research on aging is to influence policies and programs intended to promote the quality of life of older adults, the expansion of this area of research is crucial.

As rural research has developed and matured, so too has our ability to ask key questions about the nature of rural aging. Further integration of constructs in definitions of "rural" will allow for better interrogation of questions about the interaction of people and place. Articulation of diversity in resources and ideologies of rural people and communities will aid in refinement of knowledge of processes of rural aging. Much has been learned, and yet there is much still to be accomplished in understanding the growing segment of the older population in rural Canada.

References

Alcock, D., Angus, D., Diem, E., Gallagher, E., & Medves, J. (2002). Home care or long-term care facility: Factors that influence the decision. *Home Health Care Services Quarterly*, *21*(2), 35–48.

Allan, D., & Cloutier-Fisher, D. (2006). Health service utilization among older adults in British Columbia: Making sense of geography. *Canadian Journal on Aging*, *25*(2), 219–232.

Allison, M., & Hemingway, D. (2009). Older, northern and female: Reflections on health and wellness. *Perspectives*, *31*(2), 22–23.

Andrew, M.K., McNeil, S., Merry, H., & Rockwood, K. (2004). Rates of influenza vaccination in older adults and factors associated with vaccine use: A secondary analysis of the Canadian Study of Health and Aging. *BMC Public Health*, *4*, 36–43.

Andrews, M.E., Stewart, N.J., Pitblado, J.R., Morgan, D.G., Forbes, D., & D'Arcy, C. (2005). Registered nurses working alone in rural and remote Canada. *Canadian Journal of Nursing Research*, *37*(1), 14–33.

Arbuthnot, E., Dawson, J., & Hansen-Ketchum, P. (2007). Senior women and rural living. *Online Journal of Rural Nursing and Health Care*, *7*(1), 35–46.

Arskey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, *8*(1), 19–32.

Bédard, M., Gibbons, C., & Dubois, S. (2007). The needs of rural and urban young, middle-aged, and older adults with a serious mental illness. *Canadian Journal of Rural Medicine*, *12*(3), 167–175.

Bédard, M., Koivuranta, A., & Stuckey, A. (2004). Health impact on caregivers of providing informal care to a cognitively impaired older adult: Rural versus urban settings. *Canadian Journal of Rural Medicine*, *9*(1), 15–23.

Blake, A., & Cloutier-Fisher, D. (2009). Backyard bounty: Exploring the benefits and challenges of backyard garden sharing projects. *Local Environment*, *14*(9), 797–807.

Brien, S., Lorenzetti, D., Lewis, S., Kennedy, J., & Ghali, W. (2010). Overview of a formal scoping review on health system report cards. *Implementation Science*, *5*(2), 1–12.

Brophy, J., Gorey, K.M., Keith, M.M., Laukkanen, E., Hellyer, D., Watterson, A., et al. (2002). Occupational histories of cancer patients in a Canadian cancer treatment centre and the generated hypothesis regarding breast cancer and farming. *International Journal of Occupational and Environmental Health*, *8*(4), 346–353.

Brown, D.L., & Glasgow, N. (2008). *Rural retirement migration*. Dordrecht, The Netherlands: Springer.

Brozowski, K., & Hall, D.R. (2003). Elder abuse in a risk society. *Geriatrics Today: Journal of the Canadian Geriatrics Society*, *6*(3), 167–172.

Bryant, C., & Joseph, A.E. (2001). Canada's rural population: Trends in space and implications in place. *The Canadian Geographer*, *45*(1), 132–137.

Carriere, K., Yan, J., Marrie, T., Predy, G., & Johnson, D. (2004). Outcomes and costs among seniors requiring hospitalization for community-acquired pneumonia in Alberta. *Journal of the American Geriatrics Society*, *52*(1), 31–38.

Castleden, H., Crooks, V., Schuurman, N., & Hanlon, N. (2010). "It's not necessarily the distance on the map...: Using place as an analytic tool to elucidate geographic issues central to rural palliative care. *Health and Place*, *16*(2), 284–290.

Chapman, S.A. (2009). Aging well: Emplaced over time. *International Journal of Sociology and Social Policy*, *29*(1–2), 27–37.

Chapman, S.A., & Peace, S. (2008). Rurality and ageing well: "A long time here." In N. Keating (Ed.), *Rural ageing: A good place to grow old?* (pp. 21–31). Bristol, UK: Policy Press.

Chappell, N., Schroeder, B., & Gibbens, M. (2008). Respite for rural and remote caregivers. In N. Keating (Ed.), *Rural Ageing: A good place to grow old?* (pp. 53–62). Bristol, UK: Policy Press.

Clark, K.J., & Leipert, B.D. (2007). Strengthening and sustaining social supports for rural elders. *Online Journal of Rural Nursing and Health Care*, *7*(1), 13–26.

Cloutier-Fisher, D., & Harvey, J. (2009). Home beyond the house: Experiences of place in an evolving retirement community. *Journal of Environmental Psychology*, *29*(2), 246–255.

Cloutier-Fisher, D., & Joseph, A.E. (2000). Long-term care restructuring in rural Ontario: Retrieving community service user and provider narratives. *Social Science and Medicine*, *50*(7–8), 1037–1045.

Cloutier-Fisher, D., & Kobayashi, K. (2009). Examining social isolation by gender and geography: Conceptual and operational challenges using population health data in Canada. *Gender, Place and Culture*, *16*(2), 181–199.

Cloutier-Fisher, D., & Kusch, K. (2009). Breaking barriers and breaking bread: Evaluating a congregate dining program as a means of reducing social isolation and promoting friendships among vulnerable older women in a life enhancement skills group. In D. Cloutier-Fisher, L. Foster, & D. Hultsch (Eds.), *Vulnerability and resilience among older adults in BC* (pp. 251–270). Victoria, British Columbia, Canada: Western Geographical Series.

Cloutier-Fisher, D., & Skinner, M. (2006). Levelling the playing field? Exploring the implications of managed competition for voluntary sector providers of long-term care in small town Ontario. *Health and Place*, *12*(1), 97–109.

Crooks, V., Castleden, H., Schuurman, N., & Hanlon, N. (2009). Visioning for secondary palliative care service hubs in rural communities. *BMC Palliative Care*, *8*, 15–25.

Dandy, K., & Bollman, R.D. (2008). Seniors in rural Canada. *Rural and Small Town Canada Analysis Bulletin*, *7*(8), 56. Catalogue no. 21-006-X.

Davenport, J., Rathwell, T.A., & Rosenberg, M.W. (2005). Service provision for seniors: Challenges for communities in Atlantic Canada. *Longwoods Review*, *3*(3), 9–16.

De Coster, C., Bruce, S., & Kozyrskyi, A. (2005). Use of acute care hospitals by long-stay patients: Who, how much, and why? *Canadian Journal on Aging*, *24*(Suppl. 1), 91–106.

Dobbs, B., & Strain, L. (2008). Staying connected: Issues of mobility of older rural adults. In N. Keating (Ed.), *Rural ageing: A good place to grow old?* (pp. 87–95). Bristol, UK: Policy Press.

Duggleby, W., & Wright, K. (2004). Elderly palliative care cancer patients' descriptions of hope-fostering strategies. *International Journal of Palliative Nursing*, *10*(7), 352–359.

Duggleby, W., & Wright, K. (2005). Transforming hope: How elderly palliative patients live with hope. *Canadian Journal of Nursing Research*, *37*(2), 70–84.

du Plessis, V., Beshiri, R., Bollman, R., &Clemenson, H. (2001). Definitions of rural. *Rural and Small Town Canada Analysis Bulletin*, *3*(3). Catalogue no. 21-006-XIE. Accessed March 2010 from http://www.statcan.gc.ca/pub/21-006-x/21-006-x2001003-eng.pdf

Eales, J., Keefe, J., & Keating, N. (2008). Age-friendly communities. In N. Keating (Ed.), *Rural ageing: A good place to grow old?* (pp. 109–120). Bristol, UK: Policy Press.

Fast, J., & de Jong Gierveld, J. (2008). Ageing, disability and participation. In N. Keating (Ed.), *Rural ageing: A good place to grow old?* (pp. 63–73). Bristol, UK: Policy Press.

Finlayson, M., Lix, L., Finlayson, G., & Fong, T. (2005). Trends in the utilization of specific health care services among older Manitobans: 1985 to 2000. *Canadian Journal on Aging*, *24*(Suppl. 1), 15–27.

Forbes, D., & Edge, D. (2009). Canadian home care policy and practice in rural and remote settings: Challenges and solutions. *Journal of Agromedicine*, *14*(2), 119–124.

Gauthiera, E., Fortierb, I., Courchesnea, F., Pepinb, P., Mortimerc, J., & Gauvreau, D. (2001). Environmental pesticide exposure as a risk factor for Alzheimer's disease: A case-control study. *Environmental Research*, *86*(1), 37–45.

Gorman, M., MacKnight, C., & Rockwood, K. (2004). Feasibility of telemedicine for specialized geriatric care of elderly people at a regional referral hospital. *Geriatrics Today*, *7*(3), 93–97.

Hanlon, N., Clasby, R., Halseth, G., & Pow, V. (2007). The place embeddedness of social care: Restructuring work and welfare in Mackenzie, BC. *Health & Place*, *13*(2), 466–481.

Hanlon, N., & Halseth, G. (2005). The greying of resource communities in northern British Columbia: Implications for health care delivery in already under-serviced communities. *The Canadian Geographer*, *49*(1), 1–24.

Harbison, J., Coughlan, S., Karabanow, J., & VanderPlaat, M. (2004). Offering the help that's needed: Responses to the mistreatment and neglect of older people in a rural Canadian context. *Rural Social Work*, *9*(2), 147–157.

Harbison, J., Coughlan, S., Karabanow, J., & VanderPlaat, M. (2005). A clash of cultures: Rural values and service delivery to mistreated and neglected older people in Eastern Canada. *Practice*, *17*(4), 229–246.

Harris, L., Bombin, M., Chi, F., deBortoli, T., & Long, J. (2004). Use of the emergency room in Elliot Lake, a rural community of Northern Ontario, Canada. *Rural and Remote Health*, *4*(1), 1–12.

Havens, B., Hall, M., Sylvestre, G., & Jivan, T. (2004). Social isolation and loneliness: Differences between older rural and urban Manitobans. *Canadian Journal on Aging*, *23*(2), 129–140.

Havens, B., Stloukal, L., Racher, F., Norris, D., Keefe, J., & Coppin, A. (2001). Finding and using rural aging data: An international perspective. *The Journal of Rural Health*, *17*(4), 350–355.

Hayward, L., Davies, S., Robb, R., Denton, M., & Auton, G. (2004). Publicly funded and family-friend care in the case of long-term illness: The role of the spouse. *Canadian Journal on Aging*, *23*(Suppl. 1), S39–S48.

Hemingway, D., & MacLeod, T. (2004). Living north of 65 years: A community process to hear the voices of the northern seniors. *Rural Social Work*, *9*, 137–146.

Higuchi, K.A.S., Hagen, B., Brown, S., & Zieber, M.P. (2006). A new role for advanced practice nurses in Canada: Bridging the gap in health services for rural older adults. *Journal of Gerontological Nursing*, *32*(7), 49–55.

Hodge, G. (2008). *Geography of aging: Preparing communities for the surge in seniors*. Montreal, Quebec, Canada: McGill-Queen's University Press.

Houle, L., Salmoni, A., Pong, R., Laflamme, S., & Viverais-Dresler, G. (2001). Predictors of family physician use among older residents of Ontario and an analysis of the Andersen-Newman Behavior Model. *Canadian Journal on Aging*, *20*(2), 233–249.

Hubley, A.M., Hemingway, D., & Michalos, A.C. (2003). A comparison of older informal caregivers and non-caregivers living in non-metropolitan areas. *Social Indicators Research*, *61*(3), 241–258.

Joseph, A.E., & Cloutier-Fisher, D. (2005). Ageing in rural communities: Vulnerable people in vulnerable places. In G. Andrews, & D.R. Phillips (Eds.), *Ageing and place: Perspectives, policy and practice* (pp. 133–155). London: Routledge Studies in Human Geography.

Karunanayake, C.P., & Pahwa, P. (2009). Statistical modelling of mental distress among rural and urban seniors. *Chronic Diseases in Canada*, *29*(3), 118–127.

Keating, N. (1991). *Aging in rural Canada*. Toronto, Ontario, Canada: Butterworths.

Keating, N. (Ed.) (2008). *Rural ageing: A good place to grow old?* Bristol, UK: Policy Press.

Keating, N., & Eales, J. (2011). Diversity among older adults in rural Canada: Health in context. In J. Kulig, & A. Williams (Eds.), *Rural health: A Canadian perspective*. Vancouver, British Columbia, Canada: University of British Columbia Press.

Keating, N., Keefe, J., & Dobbs, B. (2001). A good place to grow old? Rural communities and support to seniors. In R. Epp, & D. Whitson (Eds.), *Writing off the rural west: Globalization, governments and the transformation of rural communities* (pp. 263–277). Edmonton, Alberta, Canada: University of Alberta Press.

Keating, N., & Phillips, J. (2008). A critical human ecology perspective on rural ageing. In N. Keating (Ed.), *Rural ageing: A good place to grow old?* (pp. 1–10). Bristol, UK: Policy Press.

Kobayashi, K., Cloutier-Fisher, D., & Roth, M. (2009). Making meaningful connections: A profile of social isolation and health among older adults in small town and small city, British Columbia. *Journal of Aging and Health*, *21*(2), 374–397.

Kulig, J., Andrews, M.E., Stewart, N., Pitblada, R., MacLeod, M., Bentham, B., et al. (2008). How do registered nurses define rurality? *Australian Journal of Rural Health*, *16*(1), 28–32.

Kulig, J., Stewart, N., Morgan, D., Andrews, M.E., Macleod, M., & Pitblado, R. (2006). Aboriginal nurses: Insights from a national study. *The Canadian Nurse*, *102*(4), 16–20.

Kulig, J., Stewart, N., Penz, K., Forbes, D., Morgan, D., & Emerson, P. (2009). Work setting, community attachment and satisfaction among rural and remote nurses. *Public Health Nursing*, *26*(5), 430–439.

Kulig, J., & Williams, A. (Eds.) (2011). *Rural health: A Canadian perspective*. Vancouver, British Columbia, Canada: University of British Columbia Press.

Lau, F., Cloutier-Fisher, D., Kuziemsky, C., Black, F., Downing, M., Borycki, E., et al. (2007). A systematic review of prognostic tools for estimating survival time in palliative care. *Journal of Palliative Care*, *23*(2), 93–128.

Leipert, B., Kloseck, M., McWilliams, C., Forbes, D., Kothari, A., & Oudshoorn, A. (2007). Fitting a round peg into a square hole: Exploring issues, challenges, and strategies for solutions in rural home care settings. *Online Journal of Rural Nursing and Health Care*, *7*(2), 5–20.

Maberley, D.A.L., King, W., & Cruess, A.F. (2000). The prevalence of diabetes in the Cree of Western James Bay. *Chronic Diseases in Canada*, *21*(3), 128–133.

MacKenzie, P. (2001). Aging people in aging places: Addressing the needs of older adults in rural Saskatchewan. *Rural Social Work*, *6*(3), 74–83.

MacKenzie, P., & Cloutier-Fisher, D. (2004). Home sweet home: Experiences of place for retirement migrants to small-town British Columbia. *Rural Social Work*, *9*, 129–136.

Mathews, M., & Edwards, A. (2004). Having a regular doctor: Rural, semi-urban and urban differences in Newfoundland. *Canadian Journal of Rural Medicine*, *9*(3), 166–172.

McBain, L., & Morgan, D. (2006). Telehealth, geography, and jurisdiction: Issues of health care delivery in northern Saskatchewan. *Canadian Woman Studies*, *24*(4), 123–129.

McDonald, J.T., & Conde, H. (2010). Does geography matter? The health service use and unmet health care needs of older Canadians. *Canadian Journal on Aging*, *29*(1), 23–37.

McGee, P., Tuokko, H., MacCourt, P., & Donnelly, M.L. (2004). Factors affecting the mental health of older adults in rural and urban communities: An exploration. *Canadian Journal of Community Mental Health*, *23*(2), 117–126.

McKee, M., Kelley, M.L., & Guirguis-Younger, M. (2007). So no one dies alone: A study of hospice volunteering with rural seniors. *Journal of Palliative Care*, *23*(3), 163–172.

McLaren, L. (2002). Information and communication technologies in rural Canada. *Rural and Small Town Canada Analysis Bulletin*, *3*(5), 26. Catalogue no. 21-006-XIE.

Menec, V., Lix, L., & MacWilliam, L. (2005). Trends in the health status of older Manitobans, 1985 to 1999. *Canadian Journal on Aging*, *24*(Suppl. 1), 5–14.

Miedema, B., & Tatemichi, S. (2003). Gender, marital status, social networks and health: Their impact on loneliness in the very old. *Geriatrics Today*, *6*(2), 95–99.

Moore, E.G., & Pacey, M.A. (2004). Geographic dimensions of aging in Canada, 1991-2001. *Canadian Journal on Aging*, *23*(Suppl.), S5–S21.

Morgan, D., Crossley, M., Kirk, A., D'Arcy, C., Stewart, N., Biem, J., et al. (2009). Improving access to dementia care: Development and evaluation of a rural and remote memory clinic. *Aging and Mental Health*, *13*(1), 17–30.

Morgan, D., Semchuk, K., Stewart, N., & D'Arcy, C. (2002). Rural families caring for a relative with dementia: Barriers to use of formal services. *Social Science & Medicine*, *55*(7), 51–64.

Morgan, D., Semchuk, K., Stewart, N., & D'Arcy, C. (2003). The physical and social environments of rural nursing homes: Assessing supportiveness for residents with dementia. *Canadian Journal on Aging*, *22*(3), 283–296.

Morgan, D.G., Stewart, N.J., D'Arcy, C., & Cammer, A.L. (2002). Creating and sustaining dementia special care units in rural nursing homes: The critical role of nursing leadership. *Canadian Journal of Nursing Leadership*, *18*(2), 74–99.

Morgan, D., Stewart, N., D'Arcy, C., Forbes, D., & Lawson, J. (2005). Work stress and physical assault of nursing aides in rural homes with and without dementia special care units. *Journal of Psychiatric and Mental Health Nursing*, *12*(3), 347–358.

Morgan, D., Stewart, N., D'Arcy, C., & Werezak, L. (2004). Evaluating rural nursing home environments: Dementia special care units vs. integrated facilities. *Aging & Mental Health*, *8*(3), 257–266.

Patenaude, J., Tildesley, H., MacArthur, A., Voaklander, D.C., & Thommasen, H.V. (2005). Prevalence of diabetes mellitus in aboriginal and nonaboriginal people living in the Bella Coola Valley. *BC Medical Journal*, *47*(8), 429–437.

Patten, S.B., Semak, B., & Russell, M.L. (2001). Major depression: Prevalence, treatment utilization and age in Canada. *Canadian Journal of Clinical Pharmacology*, *8*(3), 133–138.

Payne, M., Perkin, T., & Payne, W. (2003). Incidence of falls by rural elders compared with their urban counterparts. *Canadian Journal of Rural Medicine*, *8*(1), 25–32.

Penz, K., D'Arcy, C., Stewart, N., Kosteniuk, J., Morgan, D., & Smith, B. (2007). Barriers to participation in continuing education among rural and remote nurses: Results from a national survey. *Journal of Continuing Education in Nursing*, *38*(2), 58–68.

Penz, K., Stewart, K., D'Arcy, C., & Morgan, D. (2008). Predictors of job satisfaction for rural acute care registered nurses in Canada. *Western Journal of Nursing Research*, *30*(7), 785–800.

Public Health Agency of Canada. (2009). *Considerations for definitions of "remote" and "isolated" in the context of pandemic (H1N1) 2009*. Retrieved March 2010 from http://www.phac-aspc.gc.ca/alert-alerte/h1n1/guidance_lignesdirectrices/cdricp-cdeicp-eng.php.

Racher, F. (2002). Synergism of frail rural elderly couples: Influencing interdependent independence. *Journal of Gerontological Nursing*, *28*(6), 32–39.

Reimer, B. (2006). The rural context of community development in Canada. *Journal of Rural and Community Development*, *1*(2), 155–175.

Ritchie, L. (2003). Adult day care: Northern perspectives. *Public Health Nursing*, *20*(2), 120–131.

Robinson, C.A., Pesut, B., & Bottorff, J.L. (2010). Issues in rural palliative care: Views from the countryside. *The Journal of Rural Health*, *26*, 78–84.

Robinson, C.A., Pesut, B., Bottorff, J.L., Mowry, A., Broughton, S., & Fyles, G. (2009). Rural palliative care: A comprehensive review. *Journal of Palliative Medicine*, *12*(3), 253–258.

Rothwell, N., Bollman, R.D., Tremblay, J., & Marshall, J. (2002). Migration to and from rural and small town Canada. *Rural and Small Town Canada Analysisi Bulletin*, *3*(6), 24. Catalogue no. 21-006-XIE.

Rozanova, J., Dosman, D., & de Jong Gierveld, J. (2008). Participation in rural contexts: Community matters. In N. Keating (Ed.), *Rural ageing: A good place to grow old?* (pp. 75–86). Bristol, UK: Policy Press.

Russell, M.L., & Maxwell, C.J. (2000). The prevalence and correlates of influenza vaccination among a home care population. *Canadian Journal of Public Health*, *91*(6), 441–444.

Sbaraglia, M., Turnbull, R.S., & Locker, D. (2002). Risk indicators for periodontal disease in a remote Canadian community—A dental practice-based study. *Journal of Public Health Dentistry*, *62*(1), 51–56.

Self, R.B., Birmingham, C.L., Elliott, R., Zhang, W., & Thommasen, H.V. (2005). The prevalence of overweight adults living in a rural and remote community. The Bella Coola Valley. *Eating and Weight Disorders*, *10*(2), 133–138.

Skinner, M.W. (2008). Voluntarism and long-term care in the countryside: The paradox of a threadbare sector. *The Canadian Geographer*, *52*(2), 188–203.

Skinner, M.W., & Joseph, A.E. (2007). The evolving role of voluntarism in ageing rural communities. *New Zealand Geographer*, *63*(2), 119–129.

Skinner, M.W., & Joseph, A.E. (2009). Placing voluntarism within evolving spaces of care in ageing rural communities. *GeoJournal*(published online: DOI 10.1007/s10708-009-9283-8). *76*, 151–162.

Skinner, M.W., & Rosenberg, M.W. (2006). Managing competition in the countryside: Non-profit and for-profit perceptions of long-term care in rural Ontario. *Social Science and Medicine*, *63*(11), 2864–2876.

Skinner, M.W., Rosenberg, M.W., Lovell, S.A., Everitt, J.C., Dunn, J.R., Hanlon, N., et al. (2008). Services for seniors in small town Canada: The paradox of community. *Canadian Journal of Nursing Research*, *40*(1), 80–101.

Skinner, M.W., Yantzi, N.M., & Rosenberg, M.W. (2009). Neither rain nor hail nor sleet nor snow: Provider perspectives on the challenges of weather for home and community care. *Social Science and Medicine*, *68*(4), 682–688.

St. John, P.D., Blandford, A.A., & Strain, L.A. (2006). Depressive symptoms among older adults in urban and rural areas. *International Journal of Geriatric Psychiatry*, *21*(12), 1175–1180.

St. John, P., Havens, B., van Ineveld, C., & Finlayson, M. (2002). Rural-urban differences in health status of elderly Manitobans. *Canadian Journal of Rural Medicine*, *7*(2), 89–93.

Statistics Canada. (2003). *Metropolitan Influenced Zone*. Retrieved March 2010 from http://geodepot.statcan.ca/Diss/Reference/Tutorial/MIZ_tut1_e.cfm.

Stewart, N.J., D'Arcy, C., Pitblado, J.R., Morgan, D., Forbes, D., Remus, G., et al. (2005). A profile of registered nurses in rural and remote Canada. *The Canadian Journal of Nursing Research*, *37*(1), 122–145.

Stones, M., & Bédard, M. (2002). Higher thresholds for elder abuse with age and rural residence. *Canadian Journal on Aging*, *21*(4), 577–586.

Strain, L. (2001). Senior centres: Who participates? *Canadian Journal on Aging*, *20*(4), 471–491.

Strain, L.A., & Blandford, A.A. (2002). Community-based services for the taking but few takers: Reasons for non-use. *Journal of Applied Gerontology*, *21*(2), 220–235.

Strain, L.A., Blandford, A.A., & St. John, P.D. (2003). Who remains cognitively intact among the 80+ age group? *Geriatrics Today: Journal of the Canadian Geriatrics Society*, *6*(3), 141–145.

Strain, L.A., & Dobbs, B. (2007). *Aging in tural Canada: An annotated bibliography, 1985-2005*. Edmonton, Alberta, Canada: Alberta Centre on Aging.

The National Advisory Council on Aging. (1989). *Understanding seniors' independence: Report no. 1*. The barriers and suggestions for action. Ottawa, Ontario, Canada.

Thurston, W., Blundell-Gosselin, H., & Rose, S. (2003). Stress in male and female farmers: An ecological rather than an individual problem. *Canadian Journal of Rural Medicine*, *8*(4), 247–254.

Tousignant, M., Hébert, R., Dubuc, N., Simoneau, F., & Dieleman, L. (2003). Application of a case-mix classification based on the functional autonomy of the residents for funding long-term care facilities. *Age and Ageing*, *32*(1), 60–66.

Wang, J.L. (2004). Rural–urban differences in the prevalence of major depression and associated impairment. *Social Psychiatry & Psychiatric Epidemiology*, *39*(1), 19–25.

Wanless, D., Mitchell, B.A., & Wister, A.V. (2010). Social determinants of health for older women in Canada: Does rural-urban residency matter? *Canadian Journal on Aging*, *29*(2), 233–247.

Witcher, C.S.G., Holt, N.L., Spence, J.C., & O'Brien Cousins, S. (2007). A case study of physical activity among older adults in rural Newfoundland, Canada. *Journal of Aging and Physical Activity*, *15*(2), 166–183.

Yiannakoulias, N., Rowe, B.H., Svenson, L.W., Schopflocher, D.P., Kelly, K., & Voaklander, D.C. (2003). Zones of prevention: The geography of fall injuries in the elderly. *Social Science and Medicine*, *57*(11), 2065–2073.