

Healthy Aging in Place: Supporting Rural Seniors' Health Needs

Juanita R. Bacsu, MA, PhD Student ¹

Bonnie Jeffery, PhD ²

Shanthi Johnson, PhD ³

Diane Martz, PhD ⁴

Nuelle Novik PhD ⁵

Sylvia Abonyi PhD ⁶

¹ Community Health and Epidemiology, Saskatchewan Population Health and Evaluation Research Unit, University of Saskatchewan, juanita.bacsu@usask.ca

² Faculty of Social Work, University of Regina; Director, Saskatchewan Population Health and Evaluation Research Unit, bonnie.jeffery@uregina.ca

³ Faculty of Kinesiology and Health Studies, Saskatchewan Population Health and Evaluation Research Unit, University of Regina, shanthi.johnson@uregina.ca

⁴ Research Ethics, Saskatchewan Population Health and Evaluation Research Unit, University of Saskatchewan, diane.martz@usask.ca

⁵ Faculty of Social Work, University of Regina, nuelle.novik@uregina.ca

⁶Community Health and Epidemiology, Saskatchewan Population Health and Research Unit, University of Saskatchewan, sylvia.abonyi@usask.ca

Abstract

Purpose: To examine the key determinants that support healthy aging in rural communities.

Sample: Forty- two participants aged 65 and older were recruited from two rural communities in Saskatchewan, Canada.

Methods: Using an ethnographic methodological approach, data was collected through semi-structured interviews, field notes and participant observation notes. Cantor's (1989) Social Care Model was used as the theoretical framework for exploring the supports that facilitate rural healthy aging.

Findings: Healthy aging among rural seniors extends significantly beyond access to physicians and formal health care. Eight key themes related to healthy aging were identified: housing; transportation; healthcare; finances; care giving; falls; rural communities; and support systems.

Conclusions: While there is evidence of poor health among rural seniors, little research has examined healthy aging or the determinants that facilitate healthy aging in rural communities. In addressing rural seniors' health needs, this study provides a fundamental basis for developing effective interventions and innovative public policy options to support rural healthy aging.

Keywords: Rural Health, Social Support, Rural Aging, Public Policy, Disparities

Healthy Aging in Place: Supporting Rural Seniors' Health Needs

In comparison to urban seniors, rural seniors are often disadvantaged in terms of having lower incomes, less education, a lack of adequate housing, less access to public transportation and poorer access to health services (Elnitsky & Alexy, 1998; Sylvestre, Christopher, & Snyder, 2006). Rural seniors are reported to have poorer mental and physical health status (Crowther, Scogin, & Johnson Norton, 2010), a higher prevalence of functional disability, increased sedentary lifestyle, less use of preventative care (Kumar, Acanfora, Hennessy & Kalache, 2001), and report more chronic illness

than urban seniors (Ortega, Metroka, & Johnson, 1993). In the current literature, there are few studies that directly address both rural senior men and rural senior women's health needs especially within the Canadian and broader North American context (Dobbs, Swindle, Keating, Eales, & Keefe, 2004). A study by Skinner and Rosenberg (2006) suggests that governments are failing to recognize the unique challenges of service delivery within the rural context such as geography, lower socio-economic status and widely dispersed populations. Accordingly, it is important to note that rural healthy aging is strongly influenced by factors which are unique to the rural context. Goins, Spencer and Williams' (2011) study, using focus groups and short survey instruments, found that rural seniors' perceptions of health contained factors which most medical professionals would not take into account such as rural culture, community context and spirituality. A study by Kivett, Stevenson and Zwane (2000) found that reciprocity and mutual support were key to maintaining health among very-old rural adults. Kumar et al., (2001) report that rural healthy aging is supported by social engagement, spirituality and physical activity. A study by Pierce (2001) found that rural senior women's perceived health status was strongly connected to their ability to remain within their own homes and rural communities. According to existing literature (Cutchin, 2003; Tang & Lee, 2011), healthy aging in place is not merely about remaining in a location to age but it involves the facilitation of independence through meeting the support needs of an aging population. However, a recent study by Davis and Bartlett (2008) found that rural seniors' desire for independence is often hindered by isolation, distance, income and access to services. A study by Johnson (1996) using questionnaires with eighty-two rural seniors, reported that one third of the respondents had no one they could depend on in times of need. Moreover, there is a rising concern about the capacity of rural communities to address the needs of an aging population (Bull, Krout, Rathbone-McCuan, & Shreffleev, 2001).

Using an ethnographic methodological approach, findings are presented from a study on the health and support needs of rural seniors. Cantor's (1989) Social Care Model was used as the theoretical framework for examining the supports that facilitate rural healthy aging. More specifically, the study's objectives were to address knowledge gaps in the health service needs of rural seniors, and to identify the supports that enable rural seniors to remain independent. The research is novel in that it sheds light on the key determinants that facilitate healthy aging in rural communities. In addressing rural seniors' health needs, this study offers a foundational basis for developing innovative interventions and workable public policy options to support healthy aging in rural communities.

Methods

Community Context

The definition of 'rural' was based on Statistics Canada's (1998) Rural and Small Town definition, as a population living outside of large urban centres with fewer than 10,000 people. Moreover, 'rural communities' were conceptualized as being underserved, sparsely populated and geographically disperse (Kivett et al., 2000). The phrase 'rural healthy aging in place' was used by the research team to examine the supports that enable seniors to remain within their rural communities to age (Cutchin, 2003).

The research was conducted in the two small, rural communities of Watrous and Preeceville, Saskatchewan, Canada. The rural town of Watrous has an agricultural-based economy, with a population of about 1,743 people; approximately 450 (25.8%) people are 65 years of age or older (Statistics Canada, 2007b). The rural community of Preeceville is also agricultural-based and has a

population of about 1,050, 396 (37.7%) of which are 65 years of age or older (Statistics Canada, 2007a).

Theoretical Framework

Cantor's (1989) Social Care Model was used as the theoretical framework for exploring the different types, informal- kin, friends and formal- social agency, of seniors' support that facilitates rural healthy aging. Cantor's model (1989) suggests that there are different levels of frailty which are primarily age dependent: a) young old (aged 65 and 74), requires assistance during episodes of illness; b) older old (aged 75 to 84), requires help with housekeeping and maintenance; and c) oldest old (aged 85 and over), needs help with personal care tasks. Respondents were recruited through convenience sampling which was guided by Cantor's categories of support. However, unlike Cantor's model, our study's results found that age was not representative of one's level of frailty and need for support. Respondents were recruited with the help of local community partners who were members of the research team. The community partners were in continual communication with the research team and provided a lead role in identifying the respondents who were interested in participating in the study. Respondents did not include seniors residing in nursing homes or full care homes.

Methodological Approach

An ethnographic methodological approach was used to examine the health and support needs of rural seniors. Ethnography is highly relevant for exploring the beliefs, everyday life and the perceptions of a cultural group (Creswell, 2007) such as rural seniors. Interviews, field notes and participant observation are common methods of data generation used in ethnographic research (Savage, 2006). Ethnographic research is often challenging as it requires a significant time commitment for trust building, data gathering, and often involves prolonged work in the community (Heyl, 2001). Accordingly, relationships with community partners who act as gate keepers are vital as they are able to foster trust and provide introduction and acceptance of the researcher into the community (Thomson, 2011). Accordingly, the research team worked in close and continual collaboration with local community partners throughout all stages of the study.

Interviews

Following ethics approval by the University of Saskatchewan and the University of Regina, a total of 42 semi-structured interviews were completed with 18 men and 24 women aged 65 and older in the rural communities of Watrous and Preeceville, Saskatchewan, Canada. Participants were enlisted with the help of local community partners and were recruited to be representative of key variables such as age and gender. The interviews were approximately one hour in length and were conducted by members of the research team. The interviews were conducted in the participants' homes and the spouses were interviewed separately. The interview guide was designed to explore the support systems that exist for rural seniors at both the personal and community level. Throughout all stages of data gathering, detailed field notes and participant observation notes were kept to document and record observations i.e., participant behaviour and beliefs, personal reflections and the overall research process (Creswell, 2007). The interview data was audio-recorded, transcribed verbatim and analyzed for common themes using the software ATLAS.ti-6 (2011).

Data Analysis

Thematic analysis was used to examine the transcripts by identifying, analyzing and describing key themes and patterns within the data (Braun & Clarke, 2006; Gibbs, 2007). Thematic analysis was used to analyze the interview transcripts, participant observation notes and field notes through the following four stages. First, six of the transcripts were independently read and reviewed by four of the researchers using an interpretive approach (Gibbs, 2007). Second, after the initial reading, the four researchers collectively worked to develop a list of emergent codes which were grounded in the data. Following this step, the entire research team, including the community partners, met to identify the areas of agreement and disagreement and develop a master code list which was used to code all of the transcripts using Atlas.ti 6 (2011). Third, throughout the data analysis, full team meetings were held to review the coding progress and resolve any coding issues as they arose. Fourth, once the coding was completed, all of the data (field notes, participant observation notes, and interview transcripts) were reviewed to identify and compare key themes from the different data sources. Following the analysis of the data, meetings were held with the full team to review the findings of the data. Lastly, community workshops were conducted with the participants in the two communities to share the results and ensure that the findings accurately represented their views.

To ensure rigor, the following five measures selected from Creswell (2007) and Richardson (2000) guided the research process. First, prolonged immersion was used by developing extended relationships and working in close and constant collaboration with community partners throughout the entire research process. The relationships with the community partners helped to foster trust and substantiate the researchers' interpretations of the data. Second, triangulation was conducted by using multiple methods of data generation such as field notes, interviews and participant observation notes. Third, thick description was facilitated by having a diverse sample of respondents who were representative of gender and age i.e., 65-74, 75-84, 85 years and over. Fourth, member checking was employed through participants' voluntary review of interview transcripts to confirm data accuracy. Fifth, peer review from the entire research team was conducted through an examination of the research process, data analysis and the data findings. Sixth substantial contribution was facilitated by working with a collaborative and innovative partnership with diverse community stakeholders i.e., health practitioners, academics, community leaders and health region representatives.

Results

In comparison to Cantor's Social Care Model (1989), the study found that age was not indicative of one's level of support required. Seniors' needs were primarily dependent upon the supports available within their rural communities. Moreover, the findings suggest that seniors' needs extend significantly beyond access to physicians and the formal health care system. In particular, eight key themes were identified in relation to the health determinants and supports of rural seniors.

Housing

Many of the participants identified seniors' housing as a pertinent issue. One woman stated, "*my concern is there isn't a whole lot of spaces available for people who are no longer able to live in their homes... Does that mean I have to go out of town, when I can't manage here.*" In particular, rural seniors felt that more affordable housing was needed across the different levels of care, from independent living to full care options. In Watrous, several respondents indicated concern with the

closure of the existing seniors' lodge and further expressed their concern that the new lodge would not address the housing needs. One rural senior commented:

Well I don't know what's going to happen when the lodge closes...When they build the new one that will just be all, there won't be any suites for people that can look after themselves to just be. So we really need something like that.

Our findings provide significant insight into rural seniors' housing needs. For example, respondents noted that any future seniors' housing needs to incorporate a common space for social interaction, as well as supports for meals, cleaning services and transportation. In Watrous, respondents (33%) who lived in condominiums felt that their needs were better addressed than seniors who lived in single family houses. Condominium living was generally described as meeting seniors' needs through downsizing, car pooling opportunities, no yard work and social interaction such as card games.

Existing literature suggests that the demand for rural seniors' housing will continue to increase from seniors' desire to age within their communities, in-migration of seniors retiring from urban communities, people moving in from farms and seniors retiring in the towns where they were raised (Statistics Canada, 2006, p. 10). Moreover, a Canada Mortgage and Housing Corporation report (2003) found that in comparison to urban seniors, rural seniors' housing often requires more costly repair and maintenance as 29% of rural Canadian housing was built before 1941. Accordingly, rural seniors planning to move out of their own homes may experience difficulties in finding appropriate seniors' housing.

Transportation

The vast majority of the respondents identified a need for formal transportation services within their rural communities such as a taxi service. One woman stated, *"little things come up and you put them off or wait until you think someone has time to help or someone comes around."* Another woman commented, *"I know I miss out on things because I just don't want to impose on my friends so unless they say "well can we come and pick you up?" Something like that it's like we have no taxi service."* Since rural communities do not have well developed transportation systems, seniors' mobility often depends on one's ability to drive.

The issue of transportation was often addressed in discussions about rural seniors' independence. More specifically, several participants equated losing their ability to drive with losing their independence. One participant stated, *"[I] dread the day I have to give up driving."* Participants described how improved transportation could enable independence for rural seniors. Moreover, driving was identified in helping to maintain functional independence and was used to compensate for poor mobility.

The findings also suggest that rural seniors have self-imposed driving restrictions which often include not driving in urban centres or long distances. In particular, many of the participants identified a need for formal transportation services to urban centres. As one participant commented, *"It's difficult to phone friends to say you have to be in the city at 7 o'clock in the morning when it gets to be more than once or twice."* Accordingly, participants described how a lack of transportation services made it difficult for them to access medical specialist appointments in urban centres.

A few of the respondents (7%) use the Saskatchewan Transportation Company's bus service to travel to their medical appointments in urban centres. Some of the respondents indicated that

their appointments were often too far from the bus depot and they would have to get cabs to take them from the depot to their medical appointments. Participants discussed having concerns about missing the bus back to their rural communities once their medical appointments were done. Subsequently, our findings suggest that inadequate formal transportation services to urban centres may be an important barrier to rural seniors' use of medical services, preventative care, health screenings and specialist appointments.

Healthcare

Two main issues were identified in relation to healthcare which included a shortage of family physicians, and being moved out of the community to receive care. In Watrous, many of the participants indicated that they were concerned that the only family physician in the town was overworked and would suffer exhaustion. A senior man from Watrous stated, *“Well [our doctor] is a damn good one here and there has been times when he has had to carry the entire load himself which is not fair.”* Another respondent stated, *“Well, I think there is a problem, we need two doctors, I don't know how the one doctor can do what he's doing, it's so hard, must be very hard.”* Similarly, a senior woman commented, *“I think the fact that we only have one doctor is a little bit of a worry. I'm afraid we're going to kill him before he gets some help; we really need a second doctor here for his sake.”* Accordingly, many of the participants described the need for Watrous to have at least two working family physicians to share the workload.

In the Preeceville community, respondents were also concerned about a shortage of family physicians; however, many of these respondents traveled to several towns outside of Preeceville to receive medical care. In particular, respondents did not seem to be reliant on a particular location of care and discussed travelling to the towns of Canora, Norquay, Wadena, Kamsack, Sturgis and Swan River. In comparison to Watrous, Preeceville has both a practicing physician and a nurse practitioner who would travel to some of the participants' farms. Many of the farm residents from the Preeceville area commented on their level of satisfaction with the health services provided by the nurse practitioner.

The second issue identified related to seniors being moved out of their communities to receive care. Many participants reported concerns related to the stress and mental strain related to being moved from one's community. One participant commented:

If you had to go into the lodge, you often can't get in here because it's small and you might get sent to Lanigan, you might get sent someplace else but then eventually you'd come back and that's a little bit of a downer.

Participants described how being moved away from one's community to receive care often had a detrimental impact on their family members' and spouses' health. A senior woman stated, *“I know when [my husband] was sick, he was in [another town] and he really, really wanted to be home in Watrous or at home. And we got home on a Saturday and died on the Sunday so.”* Respondents attributed the shuffle of seniors around to the different communities as a consequence of the continual move towards the centralization of health services to larger more urban centres.

Finances

Several Preeceville respondents identified future finances as a significant concern. As one Preeceville respondent stated, *“That's a big thing, that's a big thing. And you have to constantly worry about how you're going to pay your bills this month.”* In comparison, fewer Watrous participants identified finances as a concern. However, many of the respondents in both Preeceville and Watrous discussed finances in relation to the high cost of home care and nursing homes. More specifically, seniors described future concerns related to the high cost of nursing home care for

themselves or their spouses. Many participants were concerned about finances in relation to covering the costs for medications, medical treatment and travel to receive medical services in urban centres. A respondent indicated, *“because my pension cheque doesn’t cover itself in the [housing] facility for rent \$1059, and drugs are \$300 a little over every two months. So yeah it’s about \$150 per month [left].”* Some respondents discussed working odd jobs to help cover the high cost of medication. Overall, several of the Preeceville respondents were concerned about their finances and were not sure if their pensions would satisfy their future needs.

Care Giving

A lack of care giver services was identified as a significant obstacle for rural seniors who provide care giving. Care giving respondents indicated that additional support such as senior daycare programs would help to provide much needed relief from their care giving responsibilities. Several male respondents provided care for their wives. In Watrous, approximately one-half of the senior male respondents provided some form of care giving to their family members or neighbours. As one rural senior man commented, *“ever since she’s [his wife] had her stroke, everybody seems to stay away. You don’t have the same-you know-I find even-well, family-they’re away.”* This comment is consistent with a study conducted by Sanders (2007) on rural men who are caregivers which found that many of the men provided care in isolation because their children, family and friends were unwilling to help. Moreover, our study found that many of the respondents, who are receiving care, would like to see their care givers receive a break.

In addition, some of the care giving respondents indicated a sense of guilt and did not want to leave their spouse in respite care but would just like an afternoon off. A caregiver stated, *“because I just got to get away... I like to golf, I like to fish, but I haven’t got anybody to leave her with-I can’t anymore.”* These findings are congruent with a study by Cuellar and Butts (1999) that found caregivers’ difficulties in meeting their own needs because of restrictions placed on them by their care giving duties. Moreover, many of the participants who provided care were unaware of any formal services offered to care givers, which highlights the need for more awareness and information of existing services available.

Falls

Falls and fall related injuries were key barriers that emerged from the interviews with the rural seniors. Approximately, one-third of women (39%) and men (31%) had experienced falls with injuries which ranged from physical injuries to functional limitations. Some of the respondents’ comments made in relation to their injuries included: *“I fell on the ice and had a concussion”, “I fell, I tripped over my cane and I fell on the sink but not here in my house, hit my hand here and had two black eyes, that was it.”* Respondents tended to downplay the severity of injuries. As one respondent commented, *“I fell backwards down the steps, and I don’t feel any of the effects of that. ... He [doctor] said I cracked a bone in my back here.”* None of the respondents identified falls where they did not sustain injuries. The finding to downplay the severity of injuries might be indicative of a larger issue related to seniors underreporting falls (Allen, 2004; Roe et al., 2009). To date, there is limited research that examines how the rural context influences seniors’ health care decisions especially in relation to reporting fall and fall related injuries. However, within the rural context, cultural values of hardiness, independence and self-efficacy (Craig, 1994) may significantly influence older adults’ decision to down-play or not report a fall or fall-related injury.

Rural Communities

Opportunities for social engagement and large social networks were identified as key strengths of aging in rural communities. Many respondents commented on the importance of long-term familiarity and the high level of trust that had developed over the years with their neighbours and friends. Moreover, participants often described how people are more willing to help one another in rural communities than urban communities. As one senior participant commented:

And I think in a smaller community you know everybody, you know your neighbours and they know you and lots of times there's help there if you need it, emergency or something they are there to help you, I don't think this happens in the city.

In addition, many participants felt that urban seniors would be lonelier than rural seniors. As one respondent stated, *"My opinion would be there's probably a lot more lonely people in the city than there is in the town."* Accordingly, many of the rural seniors discussed the importance of social connectedness and long-term friendships within their rural communities.

It is important to recognize that rural seniors are diverse and not all seniors living in rural communities have strong social networks. Russell and Schofield (1999) note that social isolation is often connected to a death of a spouse, illness, disability, retirement and low income. The results from our study suggest that a driver's license and one's level of social interaction are closely linked. A participant who was unable to drive and lived alone on a farm stated, *"No, nobody over here does play cards. No, no everything is dead here. (laughter)... And that main road, you know, you see the main road there. There's nobody there."* Accordingly, our findings suggest that social isolation within the rural context may be further compounded by loss of a driver's license and inability to drive.

Support Systems

In comparison to Cantor's Social Care Model (1989), our study found that age was not indicative of the support required by rural seniors. In Preeceville, participants who were classified into Cantor's category of 'oldest-old', aged 85 and over, were often in better health and required less support than participants who were classified as young old, aged 65 and 74,. In Watrous, some of the participants classified as 'older old', aged 75 to 84, were in poorer health and required more support than some of the participants categorized as 'oldest-old', aged 85 and over. Overall, age was not found to be representative of participants' required level of care. These findings suggest that Cantor's model requires modification to classify seniors' frailty based on the types of support required rather than their age.

The study's results reveal that informal supports such as spouses, family and friends are accessed more frequently than formal supports such as private service providers. Respondents were less likely to identify that they were receiving support if it was provided by a spouse or a family member. Informal supports most often provided assistance with transportation, house cleaning and yard work. One respondent stated that, *"everybody works so they got to work me in between. I try to get any appointment in, when they can ... So, nobody is really right around here that can give me a hand."* Another participant commented, *"we are lucky we have kids in town but they've got their hands full with their own families and their own places."* Accordingly, while family and friends provide support, many rural seniors refrain from asking for help in order to avoid being a burden.

Formal supports accessed included foot care, housekeeping services and home care. Formal supports were only accessed if informal supports were unavailable. While homecare provides support, respondents described how more support is required throughout the 24 hour timeframe. One senior man commented:

I'm not being critical of the system I mean God bless home care and the people that work there but they come in 3 or 4 times a day and sure they can see that you get your pills and they can see you do little things but people are still basically on their own from 8:00 at night till 8:00 in the morning and that in my opinion is a crying need and yet I'm not sure what the answer is either to tell you the truth.

Respondents indicated that it would be useful if home care provided more services such as housekeeping and vacuuming; however, many were unaware of the home care services available. Home care was usually only accessed for short timeframes such as coping with an illness or for recovery from a surgery.

The findings suggest that gender has a crucial role in determining the composition and types of support accessed by rural senior men and women. In particular, there was an indication of a sense of reluctance and guilt in asking for help with tasks related to traditional gender roles among men and women. Senior men indicated a sense of reluctance in asking for help with yard work or home repairs. One male respondent stated, *"I know this year I couldn't shovel snow, and a neighbour came over before I could even ask him to do it you know. I kind of feel bad that I can't do it myself..."* Senior women were often less sharing regarding their needs for instrumental support associated with housekeeping or meal preparation.

Discussion

The study's findings indicate that rural seniors' health determinants extend significantly beyond access to physicians and the formal health care system. While having access to health and medical services was identified by many participants there were aspects of seniors' support systems that underscore the influence of other health determinants such as housing, care giving and transportation. The research sheds light on the need for more information and awareness of existing services available to rural seniors such as home care and respite care services. In particular, with limited housing options, no formal transportation services, growing financial concerns and inadequate caregiver support, many seniors without family often have to move to care facilities outside of their communities. The results suggest that strategies outside the formal health care system are necessary for addressing rural seniors' health service needs.

The aging demographic has significant implications for policy makers and rural communities across Canada. While there is evidence of poor health among rural seniors, little research has examined healthy aging or the key determinants that facilitate healthy aging in rural communities at the population level. Moreover, predictions of escalating pressures on health services continue to rise with the anticipated growth of seniors in rural Canada. It is, therefore, important to examine the challenges and opportunities that rural seniors experience in order to support healthy aging in rural areas. In order to improve rural seniors' health, policy makers need to consider not only the traditional healthcare system, but also the other components of rural seniors' support systems, such as housing, transportation and finances. In addressing rural seniors' health needs, this study provides a fundamental basis for establishing workable interventions and innovative public policy options to improve healthy aging in rural communities.

Supporting Agencies

Saskatchewan Health Research Foundation, Canadian Centre for Health and Safety in Agriculture, and Canadian Institutes of Health Research

References

- Allen, T. (2004). Preventing falls in older people: Evaluating a peer education approach. *British Journal of Community Nursing*, 9, 195-200. [MEDLINE]
- ATLAS.ti 6. (2011). Scientific Software Development GmbH, Berlin. Retrieved from http://www.atlasti.com/uploads/media/miniManual_v6_2011.pdf
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.
- Bull, N., Krout, J., Rathbone-McCuan, E., & Shreffleev, M. (2001). Access and issues of equity in remote/rural areas. *The Journal of Rural Health*, 17, 356-359. [MEDLINE]
- Canada Mortgage and Housing Corporation (CMHC). (2003). Housing needs of low income people living in rural areas: The implications for seniors. *Research Highlights*, 1-6. Retrieved from <https://www03.cmhc-schl.gc.ca/catalog/productDetail.cfm?lang=en&cat=32&itm=4&fr=1355844165182>
- Cantor, M. H. (1989). Social care: Family and community support systems. *Annals of the American Academy of Political and Social Sciences*, 503, 99-112.
- Craig, C. (1994). Community determinants of health for rural elderly. *Public Health Nursing*, (4), 242-246.
- Creswell, J.W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*, 2nd edition. Thousand Oaks, CA: Sage.
- Crowther, M. R., Scogin, F., & Johnson Norton, M. (2010). Treating the aged in rural communities: the application of cognitive-behavioural therapy for depression. *Journal of Clinical Psychology*, 66, 502-512. [MEDLINE]
- Cuellar, N., & Butts, J. (1999). Caregiver distress: What nurses in rural settings can do to help. *Nursing Forum*, 34, 24-30. [MEDLINE]
- Cutchin, M. (2003). The process of mediated aging-in-place: A theoretically and empirically based model. *Social Science & Medicine*, 57, 1077-1090. [MEDLINE]
- Davis, S., Bartlett, H. (2008). Healthy aging in rural Australia: Issues and challenges. *Australasian Journal of Ageing*. 27,56-60. [MEDLINE]
- Dobbs, B., Swindle, J., Keating, N., Eales, J., & Keefe, J. (2004). *Caring contexts of rural seniors*. Edmonton, AB. Retrieved from http://www.veterans.gc.ca/pdf/pro_research/rural-seniors-technical-report-phase3.pdf
- Elnitsky, C., & Alexy, B. (1998). Identifying health status and health risks of older rural residents. *Journal of Community Health Nursing*, 15, 61-75. [MEDLINE]
- Gibbs, G. (2007). *Analyzing Qualitative Data*. London: Sage.
- Goins, R., Spencer S., & Williams, K. (2011). Lay meanings of health among rural older adults in Appalachia. *The Journal of Rural Health*, 27, 13-20. [MEDLINE]
- Heyl, B. S. (2001). Ethnographic interviewing. In P. Atkinson, A. Coffey, S. Delamont, J. Lofland, & Lyn Lofland (Eds.), *Handbook of ethnography*, 369-383. Thousand Oaks, CA: Sage Publications.
- Johnson, J. (1996). Social support and physical health in the rural elderly. *Applied Nursing Research*, 9, 61-66. [MEDLINE]
- Kivett, V., Stevenson, M., & Zwane, C. (2000). Very-old rural adults: Functional status and social support. *Journal of Applied Gerontology*, 19, 58-77.
- Kumar, V., Acanfora, M., Hennessy, C. H., & Kalache, A. (2001). Health status of the rural elderly. *Journal of Rural Health*, 17, 328-331.

- Ortega, S.T., Metroka, M.J., & Johnson, D.R. (1993). In sickness and in health: Age, social support, and the psychological consequences of physical health among rural and urban residents. In C.N. Bull (Ed.), *Aging in Rural America*, 101-116. Newbury Park: Sage.
- Pierce, C. (2001). The impact of culture of rural women's descriptions of health. *Journal of Multicultural Nursing & Health*, 7, 50-53.
- Richardson, L. (2000). Evaluating ethnography. *Qualitative Inquiry*, 6, 253-255.
- Roe, B. Howell, F., Riniotis, K., Beech, R., Crome, P., & Onget, B. (2009). Older people and falls: Health status, quality of life, lifestyle, care networks, prevention and views on service use following a recent falls, *Journal of Clinical Nursing*, 18, 2261-2272. [MEDLINE]
- Russell, C., & Schofield, T. (1999). Social isolation in old age: A qualitative exploration of service providers' perceptions. *Ageing and Society*, 19, 69-91.
- Sanders, S. (2007). Experiences of rural male caregivers of older adults with their informal support networks. *Journal of Gerontological Social Work*, 49, 97-115. [MEDLINE]
- Savage, J. (2006). Ethnographic evidence: The value of applied ethnography in healthcare. *Journal of Research in Nursing*, 11, 383-393.
- 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 Sciences and Medicine*, 63, 2864-2876. [MEDLINE]
- Statistics Canada. (2006). *A portrait of seniors in Canada*. Catalogue number 89-519-XIE. Retrieved from <http://www.statcan.gc.ca/pub/89-519-x/89-519-x2006001-eng.pdf>
- Statistics Canada. (1998). Rural and small town population is growing in the 1990's. *Rural and Small Town Canada Analysis Bulletin*. Ottawa: Statistics Canada. Retrieved from <http://www.statcan.gc.ca/pub/21-006-x/21-006-x1998001-eng.pdf>
- Statistics Canada. (2007a). Preeceville, Saskatchewan (Code4709064) (table). *2006 Community Profiles 2006 Census*. Statistics Canada Catalogue no. 92-591-XWE. Ottawa. Retrieved from <http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E>
- Statistics Canada. (2007b). Watrous, Saskatchewan (Code4711053) (table). *2006 Community Profiles 2006 Census*. Statistics Canada Catalogue no. 92-591-XWE. Ottawa. Retrieved from <http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E>
- Sylvestre, G., Christopher, G., & Snyder, M. (2006). *The mobility needs and transportation issues of the aging population in rural Manitoba*. Winnipeg: Institute of Urban Studies, University of Winnipeg.
- Tang, F., & Lee, Y. (2011). Social support networks and expectations for aging in place and moving. *Research on Aging*, 33, 444-464.
- Thomson, D. (2011). Ethnography: A suitable approach for providing an inside perspective on the everyday lives of health professionals. *International Journal of Therapy and Rehabilitation*, 18, 10-16.