Rural and urban older adults’ perspectives of strength in their daily lives

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Abstract

Aim: The purpose of this study was to understand older adults’ perspectives of strength in their daily lives.

Background: Maintaining strength is important as the population ages and many older adults live into their 80s and 90s. Few studies have explored older adults’ views of strength and its management as they age.

Methods: A qualitative descriptive design was used. The sample consisted of 5 focus groups (n = 41) that participated in semistructured interviews. Transcribed data were analyzed using the constant comparative method.

Results: Three themes emerged—the capacity to meet variable demands, changes in strength, and strategies to stay strong.

Conclusions: Older adults regard strength as an integration of physical and internal capacities for meeting a range of demands and use physical, mental, and social activities for staying strong. Nurses have an important role in helping older adults focus on strength and their abilities rather than inabilities to enhance healthy aging.

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As the population grows older, the importance of healthy aging has never been greater. One of the goals of healthy aging and longevity is pushing morbidity into a compressed time frame and living disease and illness free for as long as possible. Over a 12-year period, among older adults with fewer risk factors and healthier lifestyles (Hubert, Bloch, Oehlert, & Fries, 2002), researchers found compressed morbidity, less overall disability, and delayed acceleration in functional decline before death. Important to decreasing risk and promoting health and function for healthy aging is maintaining physical strength. It is an important resource for older adults that allows them to maintain function and mobility, meet demands of daily living, and prevent falls and frailty (Goodpaster et al., 2006). Yet, declining strength is an inevitable sequela of aging resulting from a progressive loss of skeletal muscle mass. Known as sarcopenia, this loss of strength poses a major threat to safety, independence, and the ability of older adults to age in place (Porter, Vandervoort, & Lexell, 1995).

The impact that losses in strength have on function has been well documented. Decreased strength has been reported to result in losses in functional parameters such as gait speed, balance, stair-climbing speed and power, time to rise from a chair (Zacker, 2006) as well as difficulty stooping, crouching, and kneeling (Hernandez, Goldberg, & Alexander, 2010). Among community-dwelling older adults (n = 30) with mild to moderate functional limitations, lower extremity strength was significantly related to difficulty in completing 32 daily activities (Puthoff & Nielsen, 2007). In another study, community-dwelling older adults who were dependent and required assistance with activities of daily living had 30% to 65% lower leg muscle strength compared with those who were independent and did not require assistance (Hasegawa et al., 2008).
Research has emphasized strength training (ST) in addressing this age-related decline in muscle strength. Findings consistently show older adult misconceptions about age-appropriate expectations for ST activities (Bopp, Wilcox, Oberrecht, Kammermann, & McElmurray, 2004; Manini, Druger, & Ploutz-Snyder, 2005). Bopp et al. found that older rural women did not always feel that ST recommendations were realistic and appropriate for their age and included non-ST activities, such as household and occupational activities. Other researchers found that nearly 40% of older adults responded incorrectly to survey questions about recommended ST activities (Manini et al.).

Although older adults’ perceptions of ST have been explored, there has been limited qualitative study of older adults’ perceptions of strength and its meaning and significance within the context of their everyday lives. Santamaki, Altin, Ragnarsson, and Lundman (2008) found that 85-year-olds adapted to their failing bodies while perceiving themselves as still going strong. In their qualitative study of older adults’ physical activity decision making, Bocksnick and Hall (2001) found that participants evaluated their strength, stamina, and fitness positively despite not participating at recommended activity levels. Their self-evaluation represented strength as a means toward an end and an instrumental resource to do what they wanted to do. Participants used their own awareness of personal capabilities and the physical demands required for the pursuit of daily chores to determine an “appropriate” level of activity.

In contrast with the focus on physical strength of earlier work, other studies have emphasized psychological strength or “inner” or “personal” strength. As with physical strength, it has been shown to be a personal resource that promotes well-being, growth, and positive changes and helps to overcome adversities (Nygren, Norbert, & Lundman, 2007). It is generally triggered by a life event or series of life experiences, which involve hardship, loss, illness, oppression, or maturational challenge (Kim, Kjervik, Belyea, & Choi, 2011), and has been studied in older adult women (Moloney, 1995), in the oldest old (Nygren et al., 2007), and in conjugally bereaved older adults (Kim et al., 2011).

Studies of strength in older adults have explored its physical and psychological (personal or inner strength) aspects separately. Consequently, little is known about whether older adults view strength in this compartmentalized way. One study suggests that older adults may see it as integrating multiple components. Nygren et al. (2007) found that the oldest old characterized inner strength as feeling competent that was associated with knowing one’s strength both physically and mentally. Understanding older adults’ perceptions of strength and its role in their daily lives is important for nurses as a basis for developing strength-enhancing strategies to optimize older adults’ quality of life and health as they age.

Therefore, the overall purpose of this pilot study was to understand older adults’ perceptions of strength in their daily lives. The following research questions guided the study:

1. What does strength mean to older adults, and how do they describe it?
2. What are older adults’ perceptions of their own strength?
3. How has strength changed for older adults as they have aged, and what factors do they perceive have influenced these changes?
4. What strategies do older adults use in addressing changes in strength?

1. Methods

1.1. Design

This exploratory study employed a qualitative descriptive methodology in order to understand older adults’ perceptions of strength in their daily lives. Qualitative description is committed to studying a phenomenon in its natural state and producing detailed and nuanced interpretations that stay close to the data and the participants’ everyday language (Sandelowski, 2010). It is situated within the constructivist paradigm, which views reality as socially constructed. This social construction occurs according to the meanings and interpretations people make of their worlds and situations, and evolves from within their situated context, a combination of previous experiences and present circumstances (Appleton & Lindy, 1997).

1.2. Sampling

Following approval from a university behavioral research ethics board, five groups of older adult participants (>65 years) were purposely selected from across geographical sectors within a Western Canadian province to reflect its urban but also highly rural landscape. Sample selection sought to maximize variation in the older adult demographic, important at this exploratory stage in broadly assessing an understanding of strength. Those persons who were unable to give informed consent or unable to speak English were excluded from the study.

1.3. Participant recruitment

Organized senior groups from rural and urban communities within a Western Canadian province served as the pool from which group participants were recruited. Statistics Canada’s “rural and small town” definition was used and defined as the population living in towns and municipalities outside the commuting zones of centers with a population of 10,000 or more (duPlessis, Beshiri, Bollman, & Clemenson, 2001). One of the research team members initiated telephone contact with designated leaders of selected senior groups in the communities to give an overview of the study and solicit participation. The contact persons distributed information about the study by way of a recruitment brochure to older
Participants were diverse in age, gender, marital status, and living arrangements. A description of the sample is provided in Table 2.

### 2.2. Major themes

Older adult participants in this study viewed strength as a diverse resource that was important to maintain function, quality of life, safety, and longevity. Some older adults found strength nebulous and difficult to describe as conveyed by a rural-living participant, “I can’t define it; it’s not a firm enough condition.” Participants thought little about strength and often took it for granted as illustrated by one female participant, “I think I feel strong until I don’t.” Yet, older adults gave meaning to strength as they described specific situations, within the context of their everyday lives, in which they felt strong. Through comparison with self or others, older adults validated that they were still strong. Three themes emerged: the capacity to meet variable demands, changes in strength, and strategies to stay strong.

### Table 1

**Interview guide**

1. What does strength mean to you?
2. How would you describe your current strength?
3. Describe a situation when you feel/felt strong?
4. Talk about a time when you experienced a change in strength—What was that like?
5. How do you see strength as affecting your life—for example, ability to function and get around?
6. What factors do you think influence your strength (and changes in your strength)?
7. How do you manage when you feel/perceive a decrease in strength?

### Table 2

Description of sample

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2.2.1. The capacity to meet variable demands

Older adults described strength in terms of their ability to meet a range of demands. Demands included those related to everyday ordinary activities, episodic extraordinary events, or ongoing, life-changing situations. Each type of demand required a different intensity and duration of effort that exercised strength in variable ways.

2.2.2. Ability to meet everyday ordinary demands

Strength was reflected in participants’ ability to maintain function and meet demands of daily living. For the majority of older adults in this study, strength was embedded in the fabric of everyday life and involved being able to take care of self and others. Several older adults regarded strength as the physical ability to participate independently in everyday activities such as being mobile, walking, and driving. One participant emphasized this independent capacity as, “strength means the ability to take care of yourself every way you can, without no assistance, the best that you can.” Physical strength came into play in running errands, meeting deadlines, maneuvering the hills and topographical features of some communities, and sustaining longevity.

2.2.3. Reserve capacity to meet episodic extraordinary demands

For older adult participants, strength also represented the ability to meet challenging, out-of-the-ordinary physical demands in situations that were episodic and occurred irregularly. These situations demanded mounting an extraordinary physical effort and pushing beyond the energy required for ordinary daily activities. In these situations, participants viewed strength as an unused reserve that could be called upon to complete high-demand activities without feeling exhausted and enabled rapid recovery. Reserve strength was elicited in conjunction with specific demanding recreational activities (e.g., hiking and canoeing) and hard, physical, seasonal work of short duration. One female participant described her extraordinary effort in relation to an annual physical demand:

One time that I feel strong is when I do something that requires me to step out of the ordinary and make a greater effort, so every year, maybe a couple of times a year, some friends and I climb up the cliffs in Walton...

A rural living gentleman discussed how he garnered strength to meet physically demanding seasonal work, “…[e]ach fall, I usually have some hard work, physical hard work, and I find that after I’ve done a week of that, I’m back in, pretty near as good as I was years ago.”

Meeting extraordinary demands was often associated with personal feelings of accomplishment and validation from others. An aboriginal participant took pride in her demonstrable accomplishment at being able to access her strength reserve, “I found out I had quite a bit of strength left, I went to a wedding and out-danced everybody. My kids couldn’t get over it, they said oh mom can you ever dance.” In contrast, older adults described a lack of strength when demands exceeded capacity and resulted in exhaustion, such as one participant following a cardiac event finding the loading of his boat, as “just too much for me; I’m just too beat.”

2.2.4. Resilient capacity to meet ongoing, life-changing demands

Strength was also expressed as the ability to cope, to fight, to resist, or to bounce back in response to a diversity of events, whether unexpected, near-crisis situations or life-altering events at a personal, community, and cultural level. This reactive form of strength often occurred in conjunction with events over which participants had little control such as an unexpected near fall, losses in one’s physical health or that of a family member, death of a spouse, changes in community services, or receiving inequitable treatment. Although these demands involved physical effort, they were also psychosocial in nature and called forth participants’ emotional resolve, resilience, and willpower. Strength in personal situations involving the death or illness of a family member was described as “coming back to life” and “taking over and doing what they were not used to doing,” such as maintaining a home or managing finances. In response to changes or gaps in health and community services, such as not having a local physician or hospital, seniors were also called upon to make greater effort. One participant who had no formal caregiving services to help with her dying husband stated, “talk about feeling strong, I had to just bite the bullet and do everything myself.” “Getting mad/angry” or “fighting back” to overcome or redress inequitable, sometimes discriminatory, treatment called for resilient strength. An older aboriginal participant described strength of spirit as “have[ing] to have the ability to fight all the time” for social justice and equal access to resources and services.

2.2.5. Variable changes in strength

Changes in strength emerged as another theme that participants characterized as variable in terms of gains and losses, onset and duration, and temporal features. Participants described both gains and losses. Declines in strength were more commonly described and varied from subtle and insidious to sudden and unexpected. Participants experienced daily fluctuations in strength such as “get[ting] weak at the end of the day.” Other subtle changes in strength included the following: (a) slowing down and taking longer to complete activities, such as “taking 6 hours to do what used to take 3 hours to do;” (b) tiring more easily; (c) lacking stamina and motivation, exemplified as “wanting to put my feet up more;” or (d) failing to keep up with peers.

In contrast to the subtle and insidious changes in strength, other older adults experienced sudden losses of strength because of health conditions such as heart disease, thyroid disease, spinal stenosis, and sciatica. These sudden losses, experienced in both arm and leg strength, were often dramatic and incapacitating and described in absolute terms such as I can’t do this, I lost all my leg strength, I couldn’t lift things
with my arms, or impossible in conjunction with everyday activities such as walking and climbing stairs. Participants often recalled vividly these sudden losses as having occurred within the past 3 to 5 years. In some cases, strength was regained, whereas in others, it was lost permanently. A 75-year-old urban male following cardiac surgery describes an irreversible loss in strength:

I used to be independent to the fact that I did my own yard work, I did my own repair work around the home. I did everything myself...ever since my triple bypass, however, because of the loss of strength, a lot of this stuff [yard work] I can’t do anymore.

2.2.6. Strategies to stay strong

Older adult participants worked constantly to maintain, prevent, or regain loss of strength as they aged. They used two main strategies to stay strong that included the following: (a) involvement in physical, mental, and social activity and (b) giving and receiving support.

2.2.7. Involvement in physical, mental, and social activity

Staying strong for older adult participants was striving to be active and involved physically, mentally, and socially. Participants often described these activities as having a mutual interacting influence on strength, such as the effect of mental activity on physical strength and physical involvement on “keeping your mind.” The majority viewed mobility as critical to “keep that strength,” engaged in various types and levels of physical activity, and integrated exercise into their daily activities. Motivation for physical activity/exercise varied among participants, with some using it to regain strength in self-managing a medical condition such as sciatica or a chronic disease such as diabetes; others to reverse a sedentary lifestyle because of peer pressure or, still, others to optimize existing strength.

Walking, whether individually or in groups, was the most commonly mentioned exercise associated with staying strong. It varied in duration and intensity from walking to the grocery store, walking up hills or on flat areas, or going on lengthy hikes. Some older adults identified that they were attending programs specifically designed for seniors or were participating in regular programs at local fitness centers. Others incorporated exercise into home-based activities, such as yard maintenance, intentional stair climbing, or daily kitchen activities using a self-designed conditioning system of handheld weights.

Keeping mentally and socially active and involved were other strategies for staying strong. Mental activity included interaction and conversations with others, educating themselves and information gathering, and “doing things to keep your brain going.” One participant identified “getting out and getting involved as one of the secrets of staying strong,” whereas another older female adult described being depressed and weak until she started “to get out and join stuff.”

2.2.8. Giving and receiving support

Support, whether given or received, was a pervasive strategy identified by older adults for staying strong. Informal support from family, friends, neighbors, and community members and formal support from community organizations helped older adults maintain existing strength and regain strength during periods of immobility. One participant illustrates the impact of her family’s emotional support on strength, “something that makes me feel strong is emotional support, that literally physically affects you.” Participants further viewed the need for a willing attitude to ask for and receive support as important to staying strong. In contrast, participants described those who were alone, isolated, depressed, and had no one to support them as weaker.

Giving support was also acknowledged as a self-perpetuating means of staying strong. This support and help occurred within the context of specific relationships as captured by one participant, “I see a lot of these women display strength in the way they meet the needs of other people. Family, friends, it seems to strengthen them, in the process of strengthening others.” But support was extended to helping seniors at the structural level to stay strong through advocacy and political activism to affect policy and organizational change. One senior described her community’s efforts to encourage older adults to assume self-responsibility for physical strength, “...for right now we just have to bite the bullet and look after ourselves.” Mutual support through intergenerational activities was emphasized in one of the rural communities as a way to strengthen everyone; by having older adults share their wisdom and perspectives and having youth share their energy and enthusiasm.

3. Discussion

This is one of the few studies to explore older adults’ perceptions of strength and its role in their daily lives. It highlights the integrative, holistic nature of strength for older adult participants and its constituent physical and internal, psychosocial capacities. Few studies have highlighted strength in this integrative way (Nygren et al., 2007). Embedded in the daily life of older adults, strength as a physical capacity was adjusted to meet a range of demands, similar to other findings (Bocknick & Hall, 2001) and consistent with environmental press theory in which functional competence is matched to environmental demands (Iwarsson, 2005).

More than a physical capacity, strength for older adults in this study was also an internal capacity required to meet certain demands triggered by life events and experiences. Similar to concepts of inner or personal strength (Kim et al., 2011) and resilience (Hardy, Concato, & Gil, 2004), the internal capacity appeared to interact with physical capacity in a synergistic way. For example, older adult participants spoke of internal strength augmenting or enhancing existing physical strength that allowed them to accomplish extraordinary demands, such as home maintenance or caretaking
activities, they had never done before. In support of relationships between the components of strength, other researchers have noted a significant relationship between grip strength and resilience among community-dwelling older adults (Hardy et al., 2004).

3.1. Implications for practice and future research

The current findings have several implications for nurses working with community-dwelling older adults. Nurses’ strength enhancement efforts should raise older adults’ awareness that strength is not an unlimited resource but needs to be constantly replenished. Education that emphasizes connections between strength, functional independence, and healthy aging and the significant role played by gradual sarcopenia may prompt older adults to be more proactive in combating strength declines and its negative and irreversible consequences over the long term.

Older adult participants described changes in strength that ranged from fluctuating daily changes to insidious, gradual declines and to drastic and unexpected losses. Although the latter often created the greatest disruption for older adult participants, these changes were generally reversible. On the contrary, older adults appeared less attentive to managing insidious changes, perhaps reflecting their acceptance of these types of changes as a part of aging. Such changes should not be dismissed. Community-based nurses should be attuned to these changes through the screening of older adults for subtle indicators of strength decline such as taking longer, slowing down, and tiring. Nurses can play a significant role in encouraging older adults to build and maintain high baseline strength to stave off these insidious declines and optimize their capacity to meet variable challenges. Possessing higher baseline strength has been shown to allow older adults to perform activities more easily and have “reserves” of strength for unexpected situations (Samuel, Rowe, Hood, & Nicol, 2011).

Older adults used a number of useful strategies for staying strong. Although physical activity was a key strategy, it was not always evident that it involved resistance, which is typically associated with strength enhancement. This finding is consistent with reports of low participation in resistance training programs among the older adult cohort (Schoenborn & Barnes, 2002). Of all activities, walking was the most commonly used for staying strong and the one that nurses should encourage because recent work shows a positive association between walking and lower extremity strength (Puthoff, Janz, & Nielsen, 2008). Nurses could promote additional strength benefits by having older adults explore modifications, such as the use of ankle weights to increase lower body resistance, or the integration of simple activities, such as dumbbell repetitions, into home management activities to enhance upper body strength.

Older adults’ strategies for staying strong were consistent with their more holistic views of strength but may not be approaches nurses typically take into account. Although nurses need to give continued emphasis to promoting physical activity, they must also give equal attention to encouraging mental and social activity because of the important role they play for older adults in staying strong. Beyond the individual level, nurses have opportunities at the broader community level to create environments that support strength through policy change, partnering with seniors groups, and facilitating intergenerational initiatives. This is an area for continued exploration because some, but not all, older adult groups specifically identified broader community level strategies.

This study had limitations. An objective measure of strength was excluded to avoid cueing participants but might have complemented subjective perceptions. Use of “organized seniors groups,” although affording older adult participants potentially greater social connection, may have provided perspectives not representative of nongroup older adults. Men were underrepresented in the sample, which limited a consideration of gender in participants’ perspectives of strength. Including rural and urban older adults gave a more comprehensive picture of strength. However, future work may need to reconsider the definition of “rural” because urban participants, who lived in small communities within the 100-km commuting distance of a major center, often considered themselves rural.

4. Conclusion

In conclusion, findings from this study reveal that older adults regard strength as an integration of physical and internal capacities for meeting a range of demands. The findings call attention to the need for approaches that capitalize on the synergy of the constituent components to maximize strength. Further research could focus on relationships between strategies older adults used to stay strong and their relationship to objective measurements of strength. Focus on strength is a refreshing contrast to weakness, loss, and decline, which typically attend aging and may be the impetus for older adults to acknowledge their abilities rather than inabilities to enhance healthy aging.

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