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ADVICE FROM RURAL ELDERS: WHAT IT TAKES TO AGE IN PLACE

Cheryl J. Dye

Department of Public Health Sciences, Clemson University, Clemson, South Carolina, USA

Deborah F. Willoughby

School of Nursing, Clemson University, Clemson, South Carolina, USA

Dina G. Battisto

School of Architecture, Clemson University, Clemson, South Carolina, USA

Older adults prefer to age in place (AIP), and there are psychological, physiological, and economic benefits in doing so. However, it is especially challenging to AIP in rural communities. AIP models have been tested in urban settings and age-segregated communities, but they are not appropriate for rural communities. This paper presents rural AIP variables identified in the literature as well as those described by 39 older adults in five focus groups.

Older adults prefer to stay in their familiar homes and communities (i.e., age in place). Despite their intentions, older adults move for various reasons such as diminishing health status, economic hardships, poor housing quality, and lack of support services and care giving. Rural elderly have a particularly strong "attachment to place"

Address correspondence to Cheryl J. Dye, Department of Public Health Sciences, Clemson University, Clemson, SC 29634-0721. E-mail: tcheryl@clemson.edu

but face some of the greatest challenges to aging in place (AIP). This paper highlights specific challenges identified in the literature confronting rural elderly and the types of services, programs, and environmental improvements needed for them to AIP.

DEMAND FOR AGING IN PLACE

AIP is an idea that derived from the recognition that older adults prefer to remain independently within their home (American Association of Retired Persons [AARP] "Understanding Senior Housing...," 2003). According to the 2000 AARP survey, 92% of 65 to 74 year olds and 95% of those age over 75, living in single family detached homes, agree that they wish to remain in their home as long as possible. These findings were echoed in the 2003 survey (AARP, 2003). In 1997, only 4% of those over 65 were in a nursing home, and, of that, over 46% were age 85 or older (Center for Disease Control [CDC], 2004). An increased number of older adults are living within the greater community due to reductions in Medicare and Medicaid funding for long-term institutional care, improved health, and reduced functional impairment of older adults (Jacobzone, 2000). AIP has been promoted as a strategy for encouraging autonomy, self sufficiency, independence, sense of identity, and quality of life, as well as maximizing financial resources (Pastalan, 1999). AIP is the preferred choice because, over time, older adults attach symbolic meanings to their homes (Despres, 1991) and establish strong bonds (Rubinstein & Parmalee, 1992) with their homes and communities. Consequently, older adults feel great comfort with, and psychological attachment to, their homes (Cooper, 1995). Therefore, moving, especially to a nursing home, can be a traumatic experience (North American Nursing Diagnosis Association [NANDA], 1992). A strong attachment to place is associated with benefits of familiarity, access to neighborhood services, proximity of friends, and, especially for homeowners, financial security (Lawton, 1989).

Rural elderly have particularly strong ties to their homes, communities, and to the land because they have a distinct culture based on a long history, ethnic or cultural connections, and unique aspects including "legacy of home place" (Ponzetti, 2003). Those with low educational attainment who have lived in their homes for a long period of time express the strongest expectations that they will age in place (Robinson & Moen, 2000). Although the majority of older adults desire to AIP and are doing so, many are finding that it is increasingly challenging, especially in rural communities.

CHALLENGES TO AIP IN RURAL COMMUNITIES

A review of the gerontology, social science, and housing literature highlights the challenges to AIP within three interrelated domains: (a) individual factors, (b) physical environment, and (c) social environment and support services. The four primary challenges to AIP concluded from the first International Conference on Rural Aging—health, care giving, housing, and transportation—are represented in these domains (Goins, 2004).

Individual Factors

Residents of rural and nonrural communities have significant differences with respect to socioeconomic status (SES) (education, occupation, income); demographics (age, race, gender); psychological characteristics and health status (including functional ability and health behaviors (Economic Research Service, 2007). As rural residents age, they experience even greater disparities in health, poverty, and access to healthcare and health resources (Gamm, Hutchison, Linnae, Dabney, & Dorsey, 2003; Agency for Health Care Policy and Research [AHCPR], 1996).

SES and Demographics

Throughout the U.S., rural areas generally have a higher proportion of older persons (about 20%) compared to urban areas (about 15%) (Economic Research Service, 2007). Nonmetro elders aged 60–64 are more likely than metro elders to be poor (13%, compared to 9%). After age 85, the percentage increases to 20%, and among non–metro African Americans, the percentage is 34%. Most rural, older adults reside in the South as compared to the rest of the country (12% vs. 6%). Poverty is strongly associated with access to health care and poor health outcomes (Economic Research Service, 2007), and rates are highest among African Americans, the oldest old, women, those living alone, and those in remote rural areas (Economic Research Service, 2007; Probst et al., 2002). Compounding these disparities is the fact that many rural communities have experienced economic downturns resulting in limited resources available for elders (Kalavar & Rapano, 2003).

Health Status and Functional Ability

The lifetime probability that a 65-year-old will suffer from some form of physical disability or become cognitively impaired is 68% (AARP

"Beyond 50," 2003). This risk increases with age (CDC, 2004) especially among the rural elderly (Wakefield, 1990) who also have a high risk for depressive symptoms (Buckwalter, Abraham, Smith, & Smullen, 1993). These factors contribute to functional or mobility limitations (Kalavar & Rapano, 2003), which can determine functional independence and the ability to AIP. Functional independence involves an individual's "intrinsic ability" regardless of environment, and "actual disability," the impact of the social and physical environment on those abilities (Tabbarah, Silverstein, & Seeman, 2000).

Physical Environment

An older adult's residential environment is a critical component to understanding the challenges associated with aging in place (Hidden for Review, 2004). Residential issues include "how older people and their family members use the home environment in health, illness, and care giving," and "the interrelationships between the home environment, psychological well-being, and daily functioning throughout the aging process" (Gitlin, 2003). Eighty percent of rural elderly are home owners (Butler & Sharland, 2003); but compared to urban elderly, they are more likely to suffer from poor housing quality and obstacles that jeopardize functional independence (Butler & Sharland, 2003; Department of Housing and Urban Development [HUD], 1999). Home improvements to reduce these obstacles, however, are difficult for the rural elderly since many of them have limited incomes and education (HUD, 1999).

The social and physical environments of older adults also impact their functional independence (Tabbarah, Silverstein, & Seeman, 2000). If the home environment does not accommodate the older adult's declining functional capability, then home injuries, such as falls, may result; relocation may be necessary and, possibly, institutionalization. Research shows that more than one third of adults ages 65 years and older fall each year (Hausdorff, Rios, & Edelber, 2001), with one half to two-thirds of all falls occurring in and around the home (Wilkins, 1999).

Senior Unfriendly Communities

Rural communities, similar to autocentric suburban communities, do not possess qualities that make them livable ones, particularly for frail older adults (Duany, Plater-Zyberk, & Speck, 2000). Frequently, there is a lack of walking or biking opportunities (Burden, 2001); a lack of overlapping services (such as residential, grocery, drug store,

doctor office, bank, post office, etc); a lack of parks and public transportation (Calthorpe, 1993); and accessible greenways (Lusk, 2002). Furthermore, the absence of an enabling environment for physical activity critically influences the health status of older adults (Frumkin, Frank, & Jackson, 2004).

Transportation

Another challenge to AIP in rural communities is transportation. Older adults use private vehicles more than any other mode of transportation, but driving is not an option for nearly seven million of them. Walking is the second transportation choice followed by public transportation (Bailey, 2004), but walking as a means of transportation in most rural communities is not possible due to long travel distances and a lack of sidewalks (Coughlin, 2001). Public transportation does not exist in the majority of rural communities as well. Para transit or demand response services may be offered by area agencies on aging, but they often provide transportation only for their specific services (Coughlin, 2001). Even in the unlikely event that comprehensive public or paratransit transport services exist, (Kerschner, 2002) older adults often have difficulty using them because of decreased strength and flexibility and slowed information processing (Coughlin, 2001).

Services and Resources

Rural communities are relatively small consisting of less than 25,000 people which translates to higher per unit costs of some services, long travel distances between service delivery professionals and their clients, low utilization rates for public services, prolonged response times for emergency services, a lack of specialized home care, and limited social programs. In addition, rural communities have limited health care, and long term care services are often far from state-of-the-art medical care and facilities (Economic Research Service, 2007). Rural communities also suffer from a shortage of healthcare providers. Approximately 60% of nonmetro White Americans and 75% of nonmetro minority Americans live in Health Professions Shortage Areas (HPSAs) (Probst et al., 2002). An inadequate supply of trained personnel means that critical service delivery functions may go understaffed, scarce employees are often overworked, service quality and quantity suffer, and long-range planning becomes difficult. Even if medical care services were equally distributed across the nation, it is likely that rural, low-income residents would still lack

adequate care in a complex medical system where access is based primarily on the ability to pay (United States Department of Agriculture [USDA], 1998).

Support Services and the Social Environment

Social support from friends, family and the community is especially important to aging in place (Seeman, Lusignolo, Albert, & Berkman, 2001), but is becoming more irregular due to an increase in mobility and changes in family structure and work patterns. An environment of support and care has direct and immediate impact on the quality of life of an older adult (Mezey, Dubler, Mitty, & Brody, 2002). Access to supplementary social support is also critical for caregivers of those aging in place. Providing care for ill and disabled individuals is a challenging prospect in a changing health care environment where hospital stays are shorter and nurses are in short supply (Donelan et al., 2002). As the population ages, American families are increasingly assuming the role of caregiver with approximately 23% providing unpaid assistance to ill, disabled, or elderly persons. Among caregivers assisting with Activities of Daily Living (ADLs), 54% had received no formal instruction for performing these tasks, and those administering medication and bandaging often had very little assistance from paid professionals or paraprofessionals (Donelan et al., 2002). There is strong consensus that caring for an elderly individual with disability is burdensome and stressful to many family members; this contributes to psychiatric morbidity, compromised physiological functioning, and increased risk of health problems (Shultz & Beach, 1999). Caregivers who provide support to their spouse and report care-giving strain are 63% more likely to die within four years than noncaregivers. It has become increasingly important to provide the right kinds of support and education for caregivers, as this could lighten caregivers' burdens and help ensure high quality care at home (Donelan et al., 2002).

Community-Based Long Term Care

Little research has been conducted to investigate how to best provide long-term care in rural communities, although the federal government and states need new strategies since current ones are not cost-effective (Agency for Healthcare Research and Quality [AHRQ], 2002). There is great interest in using less costly and more appropriate home and community-based services through the coordination of health and social services across service providers and funding sources. Demonstration projects have shown promise in coordinating

services ranging from caregiver support to wellness programs for seniors under one organizational umbrella with an outreach component. However, more research is needed to sufficiently demonstrate the effectiveness of this new type of model (AHRQ, 2002).

STRATEGIES TO FACILITATE AGING IN PLACE IN RURAL COMMUNITIES

As discussed previously, the ability of rural elderly to AIP depends on several interrelated factors. Historically, needs of rural elderly have been met in a fragmented and uncoordinated fashion that originated in medical/institutional-based approaches as opposed to community-based approaches. Federal programs, such as Medicare and Medicaid, acknowledge the cost savings of helping older adults stay in their homes for as long as possible rather than be moved to institutional care. In spite of this acknowledgement, however, Medicare reimburses only limited home health services for those with acute medical problems after a hospital stay. And skilled care is reimbursed only for as long as the acute medical condition persists. Medicare does not provide continuous long-term services needed to meet chronic health and safety needs of older adults (Lau, Scandrett, Jarzebowski, Holman, & Emanuel, 2007). Additionally, decreased federal funding for senior housing has not been accompanied by adequately increased funding for supportive, assistive services for residents staying in their home communities, especially those in rural communities (Pine & Pine, 2002). Various health and social services may exist in rural communities, but accessing these services is difficult due to the disconnected sources of program information, inadequate financial resources, and the limited ability of consumers to read program materials.

Coburn, Beddow, and Ladd (2000) acknowledge the need for integration of health and social services in rural areas where access and affordability is hindered by a confusing mix of funding streams, eligibility levels, and service providers. An integrated model of service delivery requires collaboration and integration among government, private corporations, and local community organizations. Rural communities need their own tailored models of service delivery as compared to scaled down urban models that have not proven effective. Changes in how services are coordinated and delivered will require sustained and strengthened advocacy efforts by all stakeholders (Coburn et al., 2000). “A Plan of Action on Rural Aging in the 21st Century” includes policy recommendations for training

programs for family and community caregivers, health professionals, and paraprofessionals. These programs stress supporting self-health-care; maintaining mobility, independence, and mental health; preventing disability; coping with disabilities; and creating barrier-free environments (Hermanova & Richardson, 2000).

To promote AIP, Akhter and Levinson (2003) recommend training culturally competent health care professionals and paraprofessionals so they can provide high quality home-based health care services. Some of the services they could provide to rural adults include conducting needs assessments to identify problems, delivering educational programs, making referrals, coordinating care plans and service delivery options, and conducting follow-up monitoring, education, and support. Researchers have found that paraprofessionals known as indigenous lay educators or lay health advisors (LHAs), have been effective in increasing access to healthcare services among minority, low-income older adults (Krieger, Collier, Song, & Martin, 1999); linking older clients to social services such as Medicaid and the Food Stamp Program; and educating older adults on how to manage financial resources (Forti & Koerber, 2002). While these recommendations broadly provide a framework for action, recommendations for what will work in specific rural communities can only come from the residents themselves.

RESEARCH DESIGN AND METHODS

The authors were interested in promoting AIP among older adults residing in a rural county of South Carolina. To elicit perspectives from rural residents regarding appropriate strategies, specifically the use of paraprofessionals, they conducted five focus groups with adults over the age of 60 years ($N = 39$) to answer the following research questions:

What do rural elders perceive that they need to stay in their homes as long as they choose?

What are rural elders' views about how housing, financial resources, and health impacts their ability to stay in their homes?

What are the main health concerns of rural elderly?

What do rural elderly feel they need to have good health?

What do rural elderly think about the use of local paraprofessionals in helping them get the assistance they need to stay at home?

The design of the study was exploratory and descriptive. The authors used focus groups for data collection and content analysis as the technique for analyzing the focus group transcriptions. Focus group interviews require skilled, highly trained moderators who can elicit honest opinions in a comfortable environment. The moderator for the described project was trained by staff from the Centers for Disease Control and Prevention to conduct focus groups. That training included skill development in facilitating input from different types of group members, such as the shy participant or the dominant talker. The training also included strategies on how to make participants feel relaxed and willing to talk without contributing personal opinions or biases. There was also training in how to keep discussions centered on the focus group questions. The validity of focus group data lies in the moderators' skill in asking quality questions, using effective probes, and eliciting honest answers. The moderator used the focus group interview guide questions in all groups and used prepared probes as well as spontaneous probes needed to fully understand unanticipated responses. All focus group discussions were tape recorded and transcribed verbatim. The names of those making specific statements were not linked to their statements to fulfill the promise of confidentiality as stated in the informed consent forms. The informed consent documents were part of a package approved by the University Internal Review Committee before the study was implemented. The focus group moderator obtained informed consent from all the focus group participants and explained to them that,

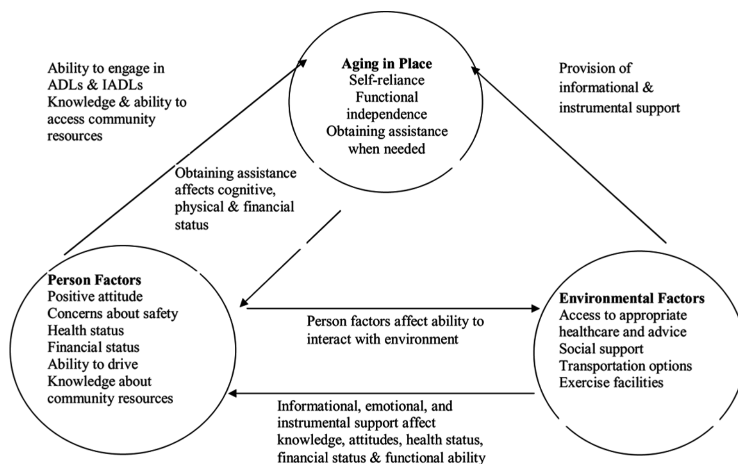

Figure 1. Factors affecting ability to age in place.

although she would tape-record the focus group discussions for transcription purposes, when the researchers shared the data they would not connect any names with anything that was stated.

The collection and analysis of data proceeded in a sequential manner from collection and transcription of raw data to content analysis of the data for emergence of themes and subthemes. The entire transcription provided meaningful data due to close adherence to the focus group interview guide. The authors analyzed the focus group data by independently examining transcriptions for emergent themes and subthemes. They then selected descriptive statements from the raw data to support specific themes. Finally, the authors constructed a diagram (see Figure 1) to represent patterns and relationships in the data according to constructs of social cognitive theory. This was done because it is an accepted practice in the social sciences to compare the results of data analysis with established theory and to present analysis results in topologies, continua, or diagrams (Kreuger, 1994).

FOCUS GROUP INTERVIEW GUIDE

The authors established content validity of the interview guide through a literature review of the factors associated with aging in place in rural communities and through their experience and expertise in qualitative research and gerontology. Social cognitive theory (Bandura, 1977) was chosen for organizing the interview guide, because it is comprehensive and takes into account personal as well as environmental factors.

Focus group discussants were recruited through local senior centers with a total of 39 participating in five focus groups (See Figure 2 and Table 1). Over 28% were in the 70–74 age range, with 20.5% in the 65–60 age range and 15.4% in the 75–79 age group. The participants represented a range of income groups with over 28% having incomes below $13,000 and 25.6% having incomes over $45,000. A range of

Opening statement – Many older people say they want to stay in their home as long as possible.
What do you think is needed to help older people stay in their homes?
Probes: Transportation?
Housing modifications?
Financial resources?
Health?
What concerns you most about your health?
What is needed to help older people be healthy so they can stay at home?
What do you think about the idea of having local people trained to help older people get the help they need?
What do you think about these trained local people helping older folks manage their health problems?

Figure 2. Focus Group Interview Guide.

Table 1. Subjects

Characteristic	N = 39 (100%)
Age	
60–64 years	4 (10.3)
65–69 years	8 (20.5)
70–74 years	11 (28.2)
75–79 years	6 (15.4)
80–84 years	5 (12.8)
85+ years	5 (12.8)
Income	
<$13,000	11 (28.2)
$13,000–$18,999	5 (12.8)
$19,000–$24,999	3 (07.7)
$25,000–$44,999	7 (17.9)
Over $45,000	10 (25.6)
Education	
No high school	3 (07.7)
Some high school	3 (07.7)
High school graduate	7 (17.9)
Some college	10 (25.6)
College graduate	15 (38.5)
Housing (Where do you live?)	
My own home	35 (89.7)
With family member	3 (07.7)
With someone other than family	
In assisted living	1 (02.6)

Note. Some participants did not indicate all information such as education and income. Therefore, in some instances, percentages do not total 100%.

educational attainment was also evident, with about 33% having a high school diploma or less and with 38.5% having a college degree. Most of the participants (89.7%) lived in their own home.

RESULTS—THEMES AND SUBTHEMES

Self-Reliance

An overall theme emerging from the data analysis is that the participants desired to remain self-reliant and functionally independent. One participant reflects this sentiment with the statement, "As long as I can do, I live"; and a participant in another group remarked, "We just want to be able to take care of ourselves." In addition to the expressed desire to remain self-reliant, however, was the acknowledgement that at

times one needs help. As one person said, "You want to be able to do for yourself as long as possible, but if you get into bad health, you have to look for something else."

Healthcare

Accessing healthcare was another prominent theme. Participants indicated their need for healthcare and their concern about affording healthcare. Several respondents talked of worries regarding the ability to afford healthcare coupled with feelings of betrayal by former companies. These were companies for which they worked that promised healthcare benefits after retirement, only to severely cut those benefits when they were needed most. As one participant related, "I worked at a company and I had a pretty good plan when I left and a lot of years when I worked there, almost 40, they kept telling me they take care of me. Well, things are changing, they started to charge me more, they started to charge for thing(s) they did not before, and they started to cutting down a lot of staff." In addition to concerns about healthcare coverage, there were concerns about getting the appropriate type of healthcare. One participant summarized this situation by saying, "Right now, the only option, if you are in pretty bad shape, is to call 911. That is kind of an extreme." The person then suggested a different approach with, "How about coming over to see if I need medical attention or not?" Other participants made suggestions for the type of help they needed such as, "Some kind of help in reminding to take medication", and "I don't know if this county has it or not but, Call a Nurse, if you have any medical questions you can call and talk to them. They answer your medical questions." There was also considerable concern among the participants about prescription drug coverage and confusion over the new Medicare prescription plan.

Health Maintenance and Chronic Disease Management

Comments from participants indicated they understood the importance of exercise, particularly walking, for heart health and for diabetes control. However, there were two opinions about the need for exercise facilities and programs: several people mentioned that this was important to enable seniors to be active; but others stated that exercise did not require special equipment or programs. One participant stated, "It seems to me that everything should be in the direction for convincing people about the value of walking, not about the value of having a facility. For some reason, we all find reasons not to do it

because we don't have a facility for exercise. I think the effort should be spent on walking up and down the street in my neighborhood or whatever, and effort should be spent on getting the attitude." Another participant concluded, "Look, if you only walk from here to across the hall today and tomorrow, keep increasing. That is the simple exercise." Others were concerned about safety when they walked; specifically, that they were concerned that they might have an unwanted encounter with someone, that their sidewalk might be rough and cause a fall, and that if they fell nobody would know where they were. A fear of falling was also mentioned in other discussions about using stairs and being careful to watch where you walk. Additionally, there was a concern about safety and weight training, with the consensus being there needed to be a qualified supervisor in the weight room at all times. One participant relayed that a woman was using the treadmill in a weight room without continuous supervision and she fell. She could not get up by herself and had to wait for some time for assistance.

When the discussion turned to managing chronic diseases, diabetes was mentioned frequently. As one participant declared, "Diabetes is not just something you should be taking on by yourself." This sentiment was echoed by another person's statement that "the single diabetic is not recommended to be living alone." Yet another participant stated, "Anybody with diabetes has really got to watch their diet and watch themselves and it is probably the worst condition you can have. It is totally treatable, but people never listen." More specifically, participants said that they needed help with being reminded about "what is right and what is wrong," dietary recommendations, assistance with injections, and having someone check on them and answer questions. One person asked, "Can there just be a person in the community that you could call?"

Arthritis and hypertension management were also mentioned during discussions. A determination to stay active was deemed important for arthritis management as summarized by a participant who said "You have to learn to judge internally whether it is time to give up for the day and pull the covers over your head and stay in bed, or whether it is time to look up and say, 'No, I won't give in!'" Hypertension management was mentioned only once through the comment, "I got high blood. I take a pill."

Social Support

As summarized earlier, participants voiced a need for ongoing contact or monitoring regarding health matters in addition to the

need for acute health care. Specific needs for informational support included information about medication management and getting answers to health-related questions. Instrumental support needs included assistance with grocery shopping, managing finances, housecleaning, home modification, yard work, and bathing. Assistance with financial management came up in several discussions related to the desire to live independently. Participants were particularly concerned about their ability to afford prescription medications and to afford long-term care. They also expressed their needs for free/low-cost advice about tax preparation, estate planning, and reverse mortgages.

More generally, many participants made comments regarding the lack of anyone to check on them. Some participants mentioned examples on how to do this by having the Meals on Wheels delivery person making a quick assessment of the health status of the person getting the meals, or by mailmen checking on residents of homes when delivering the mail. As one women said wistfully "What you really need is someone to come to have cup of tea and listen. That is the best thing you can give somebody . . . come and visit, come and socialize, come and make me feel special even it is only for a half hour for a cup of tea."

Transportation

This topic stimulated a lot of discussion as it is instrumental to self-reliance, accessing healthcare, living independently, and maintaining social ties. For these rural adults, there were few options for transportation when driving was no longer possible for themselves and their spouse. Therefore, they desired to continue driving but were also concerned about how to know when it was no longer safe to drive. As one person stated, "I don't know exactly how you end the driving career of a person." Another person noted, "There needs to be some kind of a program available which will preempt the need that actually takes someone's keys away . . . people have to realize that as time goes on they may get into a situation where they are not going to be able to drive, and what are the alternatives? If you tell them about that ahead of time, it is not so much of a chore when you have to go and say, 'Dad, I am sorry, but you can't drive anymore.'" One woman related a very difficult situation with her mother: "My mother was going to sue me when I took her keys away from her. The key thing is she was the driver for all of her friends." Others lamented that there was no organized system for accessing the variety of vans used by the local senior center and churches.

Care Giving and Need for Additional Assistance

At the end of the discussion groups, participants explored the idea of having a trained volunteer to help with the needs they identified. Most supported having a person like this because they had no one else to turn to for support. They did not want to overburden their caregiver or broader support system; and the people in their support system did not always have the information they needed. As the need for this new type of support person was discussed, two main subthemes emerged.

Trust
The participants stressed it was important to have a way to verify the legitimacy and integrity of anyone who might come to their home so they did not have to worry about theft, assault, or a breach of confidentiality.

Appropriate Training
Participants also had ideas about how the volunteers should be trained. They were concerned that the person might not understand the parameters of their role. As one stated, "You need a seminar where you teach your volunteers how to present themselves, how to get involved but not to become a factor in the clients' life. Because you don't want someone coming in . . . all of a sudden and to take control." Others suggested that the training for the support person should include knowledge about how to access local programs and services.

DISCUSSION

Based upon the literature review and the results of the focus group discussions, the required elements to age in place include select individual factors and appropriate environmental supports—both social and physical. Because of the reciprocal determinism of these elements, a linkage is needed to facilitate timely and effective interactions. Focus group discussions supported the idea that a trained member of the community could assist older adults in obtaining the services and supports they require to age in place. The community health worker's role as defined below by Health Resources and Services Administration (2007, p. iii–iv) could be expanded to fill this need:

> Community health workers (CHWs) are lay members of communities who work either for pay or as volunteers in association with the local health care system in both urban and rural environments and usually share ethnicity, language, socioeconomic status and life experiences

with the community members they serve. They have been identified by many titles such as community health advisors, lay health advocates, "promotores(as)," outreach educators, community health representatives, peer health promoters, and peer health educators. CHWs offer interpretation and translation services, provide culturally appropriate health education and information, assist people in receiving the care they need, give informal counseling and guidance on health behaviors, advocate for individual and community health needs, and provide some direct services such as first aid and blood pressure screening.

Research has demonstrated the effectiveness of community health workers in several areas relevant to the needs of rural seniors: hypertension control (Krieger et al., 1999); appointment keeping; continuity of care (Brownstein et al., 2005); development of a "therapeutic alliance" between patient, provider, and family/community support systems; risk reduction; improving patterns of health care utilization (Nemcek & Sabatier, 2003); diabetes control (Norris et al., 2006; Krieger et al., 1999); increasing the use of preventive services; keeping appointments; increasing adherence to recommended regimens; promoting appropriate use of health services (Witmer, Sarena, Finnocchio, Leslie, & O'Neil, 1995); and linking older clients to social services (Forti & Koerber, 2002).

The community health worker could promote health-related safety in the home and community. This is a concern described by Lau et al. (2007) that will increase as more older adults prefer to age in place. A CHW could address the issues described by Lau et al. (2007) as threats to health-related safety by conducting home inspections and arranging for home modifications to reduce falls, educating and mentoring in chronic disease self-management and medication management, and serving as an advocate in obtaining health and social services.

The role of community health workers has received attention from policy makers. In 1999, CHW training and certification legislation was passed in Texas. The bill also mandated that pilot projects using CHWs in Medicare managed care be conducted. From 2000 to 2006, similar bills were passed in New Mexico, Massachusetts, and Virginia. In 2000, the National Rural Health Association issued public policy statements supporting expanded roles for CHWs. Similar statements were issued in 2001 by the American Public Health Association and the American Association of Diabetes Educators in 2003 ("Community health worker national workforce study," 2007). In 2005, a Patient Navigator bill was signed into law as the first major CHW legislation adopted at the Federal level ("Community health worker national workforce study," 2007). In 2009, the Medicare Care Transitions Act

was introduced to reduce hospital readmission rates by improving the follow-up care patients receive after leaving the hospital. The bill would create a nationwide network of community-based transitional "care coaches." The duties of the coaches would include helping patients self-manage their condition and medications over time, providing personal follow-up care, and serving as an access point when patients change care settings.

We propose that the community health worker role could be tailored to the needs of rural older adults. This would require careful recruitment of potential CHWs, comprehensive training, effective oversight, and evaluation. The CHW role must be clearly defined, their goals must be well understood, and they should effectively document their activities so that efforts can be evaluated (Swider, 2002). Regnier (1999) concurred that it is essential to clearly define the scope and role of CHWs and propose that the successful use of the CHW approach depends upon their competence. The role of the community health worker could not only help provide the services and supports that older adults need to age in place, but it could also fulfill the needs of more healthy and active older adults seeking opportunities for meaningful civic engagement in their community.

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