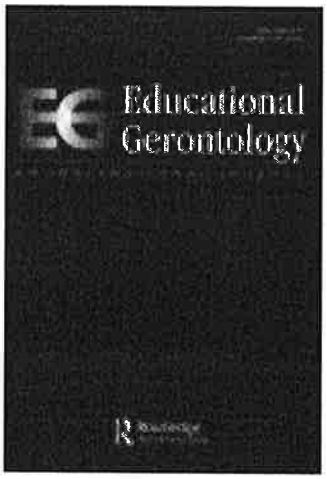

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Aging in Suburbia: An Assessment of Senior Needs

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Aging in Suburbia: An Assessment of Senior Needs

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To date, there have been no surveys focusing on older adults living in suburban communities. As the majority of American seniors reside in suburbia, it is important to understand factors that impede successful aging in these settings. This study surveyed 1,151 seniors to examine the needs of seniors living in a large suburban community across two counties in the northeastern United States. Specific areas of query included the following: transportation, health status, social support, self-sufficiency, and economic factors. Findings revealed that seniors over 85, minorities, those reporting poor health, and those who do not drive were at especially high risk of service access problems and social isolation.

A remarkable demographic transition has occurred over the last century that has dramatically increased the number and proportion of adults living over the age of 65. This demographic shift is predicted to continue over the next 20 years (Stone & Barbarotta, 2010), with some estimates indicating that as many as one-in-five Americans will be 65 years or older by 2050 (Vincent & Velkoff, 2010). This growth in the proportion of seniors has been attributed to improved living conditions, advances in medical science, and a variety of public health interventions (Centers for Disease Control and Prevention, 2011)—all of which deserve to be heralded as great achievements.

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Although the significant increase in the proportion of individuals 65 and older attests to the profound progress that has been made, investigators caution that more research geared toward understanding seniors' needs and appropriate preparation for their future growth is critical (Stone & Barbarotta, 2010). Assessing the needs of this population is particularly important for suburban communities. The majority of the 65 and over U.S. population resides in such areas and will most likely continue to do so. Over 83% of seniors indicate that they prefer to remain in their current homes in the future (AARP, 2003; Kim, 2011). Moreover, poverty rates in the suburbs compared to urban cities have been growing at a faster rate for the past decade (Kneebone & Garr, 2010), which raises concerns of how this might affect the vulnerable older population, who tend to live on limited incomes. The unique needs of seniors residing in suburban communities require further investigation in order to fully understand them now. Even more importantly, projections are needed as to what those needs might be in the future as the Baby Boom cohort ages.

Older individuals living in suburban communities may face distinct challenges when compared to seniors living in urban and rural areas. In the present study, we seek to investigate potential difficulties seniors in suburban communities might face associated with mobility, health, social support, self-sufficiency, and financial issues.

MOBILITY

As individuals grow older, driving competence tends to decrease due to vision impairments, diminished bodily functions related to movement and reflexes and cognition—all of which have been linked to increased likelihood of car crashes (Wallace, 1997). Furthermore, older adults tend not to believe that their ability to drive is compromised; in fact, they estimate their ability to be superior compared to younger individuals (Freund, Colgrove, Burke, & McLeod, 2005). In a research study examining trends in car crashes, Lyman, Ferguson, Braver, and Williams (2002) predicted that fatal crashes involving seniors will increase by 155% by 2030, and they will account for more than half of all car-related accidents. Given that suburban communities tend to be sprawled over larger areas, older adults often cannot walk to places such as their grocery store or local pharmacy (Frank, Kerr, Rosenberg, & King, 2010). Moreover, suburban communities do not have as many public transportation options as do urban areas, so most older adults are limited to using their cars. However, driving is not an option for a growing number of seniors. An increasing number of older individuals in poor health are restricted to their homes; they may be bed-bound or must rely on another person to transport them. Yet, evidence suggests that seniors do not want to be a burden to others and, as a result, are reluctant to ask for assistance (McPherson, Wilson, & Murray, 2007).

HEALTH STATUS ISSUES

Along with problems related to transportation, the increase in the 65 and over population will also bring about increased demands on the healthcare system. As individuals grow older, they typically have an increased risk of developing a variety of age-related diseases (Hayflick, 2004; Schoenborn & Heyman, 2009). These complications in older individuals may include hypertension, arthritis, heart disease, cancer and countless other health problems that typically require more intense utilization of healthcare resources when compared to younger patient groups.

Facilities that care for older individuals need to be staffed with trained personnel to be ready to take on this increased proportion of the population who require a different set of skills compared to younger patients. Some researchers indicate that there will be a dire need for additional health-care workers in the future to sufficiently provide the senior population with acute and long-term care (Stone & Barbarotta, 2010). In suburban communities, the increased imperative of addressing the needs of seniors is particularly important, as this is where most of them reside.

Research shows that 30% of individuals over the age of 65 fall every year, causing a variety of injuries including broken bones, concussions, and even death (Centers for Disease Control and Prevention, 2006). Proactive measures can potentially obviate health complications resulting from falls. Although the prevalence of injuries and death from falls in the 65 and over population has been increasing steadily with increasing life expectancy, there are effective interventions that can help in preventing them. Research shows that interventions aimed at teaching seniors specific skills to prevent falling coupled with changing their environments can significantly lessen the rate of falls (Kempton, Van Beurden, Sladden, Garner, & Beard, 2000). Seniors in suburban environments are especially at risk of falls. They typically have larger homes with an upstairs portion and basements without elevators; and this combination can make it more dangerous for seniors to walk around in their homes and, thus, increase the likelihood of accidents.

SOCIAL SUPPORT AND SELF-SUFFICIENCY

Social support is another area that potentially could be compromised for older adults living in suburban communities. Social support has been demonstrated to be an important element in the health of individuals by being beneficial in numerous ways including the following: strengthening the immune, endocrine, and cardiovascular systems; enabling a more rapid recovery from a variety of illnesses and injuries; and being positively linked to the way patients adhere to medical regimens (Cohen, 1988; DiMatteo, 2004; Helgeson & Cohen, 1996). Since living in suburban communities significantly decreases the likelihood that older individuals will commute to see their family and friends, there is also an increased risk that they will be isolated from traditional support systems. This unfortunate outcome not only robs lonely older individuals of the benefits of social support, but it is also related to a number of deleterious health consequences including an increased probability of hospitalization and mortality (Patterson & Veenstra, 2010; Rutledge et al., 2008; Shankar, McMunn, Banks, & Steptoe, 2011). Additionally, without support from others, older seniors may not be able to handle activities of daily living such as making meals and self-care.

ECONOMIC FACTORS

Economic factors pose another potential source of concern for those living in suburban communities. These areas tend to be expensive to inhabit, and many seniors live on fixed incomes. The cost of medical expenses—such as prescription drugs, health insurance premiums, and copayments—amount to as much as 19% of older Americans' total income (Crystal, Johnson, Harman, Sambamoorthi, & Kumar, 2000). In addition, housing costs, car related expenses, and countless other bills can quickly drain limited financial resources. The vast majority of seniors 65 and over receive social security benefits, representing 41% of total income (Social Security Online: http://

www.ssa.gov/pressoffice/basicfact.htm). There is also reason to be concerned about the future availability of benefits. The Summary of the *2011 annual report on the status of Social Security* indicates that the current financial situation remains challenging, with a projected deficit of $46 billion for 2011 (Social Security Online: http://www.ssa.gov/oact/trsum/index.html).

Research has consistently shown that individuals with higher incomes tend to be healthier and have lower rates of death compared to those with lower incomes (Kawachi, Adler, & Dow, 2010). Moreover, during times of economic crises, there is a higher rate of mental illness (Zivin, Paczkowski, & Galea, 2011). Some researchers indicate that economic stress experienced by older adults can be alleviated if they expect to receive support in the future (Brenes-Camacho, 2011), but judging from the Summary of the *2011 annual report on the status of Social Security*, such help is not likely to come from Social Security benefits. Even more somber is that, according to a U.S. Government Accountability Office Report, the 65 and over population poses numerous problems with regard to the nation's ability to finance a variety of federal and state run programs for the aging. These include long-term health, personal care, and supportive services (Allen, 2005).

Although researchers have previously examined issues with regard to the 65 and over population in general, no studies have focused on older adults living in suburban communities and their potential problems. The purpose of the current study is to advance the understanding of challenges faced by seniors, especially those over 85 living in suburban communities. Specifically, we seek to explore and describe older adults' ease of mobility, health status, social support, self-sufficiency, and finance related issues.

METHODS

A survey instrument was developed aimed at addressing important concerns for seniors living in suburban communities in two counties in the New York metropolitan region. The topics investigated included transportation, health status, social support, self-sufficiency, and economic factors. An advisory committee of community leaders was convened to frame the questions, and an external vendor was procured to collect the data. The survey was conducted via telephone during two time frames. The first data collection time period for the main sample was between November 24, 2010 and January 26, 2011. During this data collection period, the major intent was to obtain survey data from individuals 65 years and over with a particular focus on those individuals that were 85 or older. Individuals called were screened for age and up to nine attempts were made to reach them during various times and days of the week. In total, 3,808 telephone numbers were attempted and the final sample size consisted of 842 respondents (a response rate of 22%).

The second data collection time frame was between August 23, 2011 and September 14, 2011. The purpose of collecting data for the second time was to increase the number of persons aged 65 years or older of African-American, Asian-American, and Hispanic ethnicity, given that minorities tend to be underrepresented in survey samples. In total, 3,997 numbers were attempted for the minority sample (1,083 African-Americans, 1,689 Asian-Americans, and 1,225 Hispanics). Individuals contacted were screened for the appropriate age and ethnicity. Age, race and ethnicity were self-reported, based on surveyor prompts. The final sample size for the minority sample was 309 respondents (111 African-Americans, 99 Asian-Americans, and 99 Hispanics).

Weights were created for the main sample data (first data collection period) given the generally lower response rate in telephone surveys among minorities, males, less educated, those with

lower income, and individuals in the workplace. The weights were based on six variables drawn from the 2009 U.S. Census Bureau's American Community Survey county-level estimates for the two New York metropolitan counties' 65 and over population. The six variables were gender, education, race, ethnicity, income, and marital status. Weighting was done using an iterative process that has been developed to estimate joint weights for any number of demographic variables for which population percentages are known.

The results from the main sample are based on weighted data; the findings from the minority oversample are not. The results from the main sample and the minority oversample are discussed separately. This was done in order to provide an accurate description of older individuals in suburban communities in general and to also gain a greater insight into minorities living in such areas.

RESULTS

Demographics

The mean reported age of individuals in the main sample was 76, with 48% of respondents being between 65 and 74, 37% between 75, and 84 and 15% 85 and older. There were slightly more females (58%) than males (42%). The race and ethnic composition of the main sample consisted of Whites (87%), African Americans (6%), Asians (1%), Native Americans (1%), and other (3%). Four percent of respondents identified themselves as Hispanic or Latino. The majority (58%) reported having a high school (or less) education, 17% had some college, and 25% had a bachelor's degree or higher. Asian seniors from the minority oversample reported having the most education. Over 63% of Asian seniors indicated having at least a bachelor's degree compared to 24% of the Whites in the main sample, 24% of African Americans, and 28% of Hispanic seniors. Most respondents reported living in their community for at least 30 years (67%), living with another person (67%), and near a grocery store (75%). Only 3% reported living with their children. With regard to income, 37% reported earning less than $35,000, 43% between $35,000 and $100,000, 21% more than $100,000, and 11% refused or didn't know. The majority indicated that they are currently retired (80%).

Transportation

Overall, most seniors in the main sample reported it was "very easy" to get to a variety of places including the pharmacy (84%), grocery store (83%), friends and family (77%), their place of worship (77%), and medical appointments (75%). The overwhelming majority (93%) of seniors in the two suburban communities report getting around by car; only 3% walk and 2% use public transportation.

Although most reported it being very easy to get around, there were two subgroups of seniors who reported having difficulty. In particular, seniors in worse health were more likely to indicate having difficulty in getting to the pharmacy (14% versus 2%), grocery store (16% versus 2%), medical appointments (23% versus 3%), place of worship (6% versus 2%) and friends and family (14% versus 6%). Moreover, nondriving seniors also reported having more difficulty with getting around to each of these places including pharmacy (21% versus 1%), grocery store (25% versus

1%), medical appointments (27% versus 4%), place of worship (12% versus 1%) and friends and family (18% versus 5%).

There were also age and gender related differences with regard to transportation. Seniors aged 85 and over were less likely to drive or to have their spouse drive them compared to younger seniors aged between 65 and 74 (65% versus 92%); and women were less likely than men to drive or have their spouse drive (80% compared to 91%). Women less frequently reported that it was very easy to get to the pharmacy than men (80% compared to 91%), grocery store (78% compared to 92%), medical appointments (67% compared to 86%), place of worship (72% compared to 84%), and family and friends (69% compared to 87%).

Health Status

Most (78%) seniors in the main sample indicated that they are in either "excellent/very good" or "good" health. However, many reported being told by their doctor that they have a variety of diseases. The five most common were: hypertension (58%), arthritis (51%), heart disease (33%), diabetes (20%) and cancer (20%). In addition, a lesser number of seniors indicated being told by their physician that they were obese (11%), asthmatic (11%), anxious (11%), depressed (9%), or that they have memory loss (3%) and psychotic symptoms (1%).

Besides the variety of health complications indicated above, 11% of seniors in the main sample reported injuring themselves as a result of falling in the past 12 months. Those seniors 85 and over had a slightly higher rate of falling compared to those who are between 65 and 74 (18% versus 8%). Moreover, the rate of falling also differed between respondents in the main sample and the minority oversample. Fifteen percent of seniors in the minority sample reported falling (12% of African Americans, 18% of Asians, and 16% of Hispanics).

Results also revealed that there were differences in reported health in disparate age and educational status groups. Specifically, seniors with some college education or more tended to report being in excellent or very good health more often when compared to their less educated counterparts regardless of participant age: seniors between the age of 65–74 (59% versus 43%), 75–84 (53% versus 43%), and for those that are 85 or more (54% versus 28%).

Social Support and Self-Sufficiency

The majority (73%) of older adults in the main sample indicated that they have someone to help them with daily activities such as preparing meals. When seniors cannot perform a task by themselves, they most commonly report receiving help from their spouse (44%), child (36%), other relative (7%), employed caregiver (6%), or friend (4%).

The results were slightly different for seniors in the minority sample. Seniors in this sample were more likely to indicate that they did not have someone to help them with daily activities (African Americans = 32%, Asians = 55% and Hispanics = 34%). Asian seniors, in particular, were least likely to report having help when compared other ethnic groups. Additionally, Latino men were somewhat less likely than other men to receive help. Only 68% of male Latino seniors had someone to help compared to 81% of men in the main sample and 81% of African-American males in the minority sample.

The role of the helping individual also varied by health status. Seniors in "excellent/very good" health were more likely to rely on their spouse (47%) compared to their child (33%). Conversely, those in "fair or poor" health were more likely to rely on their child (42%) compared to their spouse (30%). Seniors that live by themselves also reported more frequently relying on their child (49%) compared to those that live with others (30%).

The results also suggested that males and females rely on different individuals. Specifically, males indicated more frequently relying on their spouse (62% versus 29%), compared to females, who reported that their child is the person that helps them most when they are in need (48% versus 21%).

Financial Issues

The median household income reported by seniors in the main sample was between $35,000 and $50,000. With respect to seniors who live alone, the median reported income is substantially less: between $20,000 and $35,000. When seniors in the main sample were asked whether they were able to meet basic costs of living, given the costs of health care, the majority indicated that they did not have difficulty with groceries (88%), mortgage or rent payments (91%), transportation (92%) and utilities (87%). However, there were differences between the main sample and the minority sample. Seniors in the minority sample reported more difficulty due to medical and health care expenses paying for meals and groceries (African Americans = 23%, Asians, = 18%, and Hispanics = 24%); mortgage or rent payments (African Americans = 22%, Asians, = 11% and Hispanics = 18%); transportation related expenses (African Americans = 20%, Asians, = 13% and Hispanics = 18%); and utilities (African Americans = 24%, Asians, = 18% and Hispanics = 20%).

DISCUSSION

The purpose of conducting this study was to explore and describe the potential difficulties that seniors living in suburban communities currently face. Overall, we found positive results showing that seniors in suburban communities are faring well with regard to getting to places they need to go, their health, social support, and paying their bills and other financial responsibilities. However, some seniors did report problems with each of the abovementioned areas. Specifically, those seniors that were older, minorities, less healthy, or did not drive, reported the most difficulty.

With regard to transportation, the overwhelming proportion of seniors indicated that driving is their primary method of getting around. This suggests that those who do not drive are severely disadvantaged. Only a small portion of seniors use other methods of transportation such as taking the train, bus, or simply walking. These findings are troubling. Research by Wallace (1997) indicates that as seniors get older, cognitive and medical conditions make it more likely that they will be involved in motor vehicle accidents, and many give up driving voluntarily. In fact, Lyman et al. (2002) project a 155% increase in car crashes involving seniors by 2030 if appropriate measures are not taken.

In Canada, there are older driver refresher programs based on teaching knowledge and improving actual driving skills aimed at preventing car-related accidents; and according to Korner-Bitesky, Menon, von Zweck, and Van Benthem (2010), these programs are showing promise in

improving driving competence in older adults. Perhaps such programming is especially applicable to suburban senior communities in the U.S.

Nondrivers, on the other hand, may benefit from initiatives targeting the development of senior-friendly neighborhoods. Such neighborhoods have been constructed in Portland, Oregon, and research shows that they have been successful in encouraging active senior aging (Michael, Green, & Farquhar, 2006). These senior-friendly neighborhoods provide easy access to shopping, and public transportation, obviating the need to own and use a car.

Another option for nondrivers is to provide seniors with transportation services that come to the home. For example, Project Independence (http://www.tonhprojectindependence.net/), in the Town of North Hempstead, New York, provides free taxi transportation for shopping for residents age 60 and over. It also provides discounted nonemergency medical transportation, as well as bus transportation to senior centers.

Other than nondrivers, older seniors indicated having more difficulties than their younger counterparts. Those over the age of 85 were less likely to drive and experienced a higher rate of falls. This particularly vulnerable age group needs to be provided with preventive best practice programming to ensure decreased risk of injury. Such programming has been developed and implemented in New Zealand. There, seniors were taught an exercise program specifically targeting the prevention of falls as well as moderating their effects when they do occur (Gardner, Buchner, Robertson, & Campbell, 2001). A study investigating the effects of the program with participants aged 80 years or older showed that they were significantly less likely to experience falling or injury as a result of following the program (Gardner et al., 2001). This particular exercise regimen focused on muscle weakness and impaired balance. Participants were instructed to perform the exercises for 30 minutes, three times per week in their homes. The training regimen did not require any special equipment, and it was taught to seniors by either a physical therapist or a nurse who came to their homes. This program, considered a best practice by the Centers for Disease Control, may be effective in reducing falls in suburban areas with seniors who do not want to—or cannot—leave their homes.

Similarly, we need to ensure that suburban seniors over 85, particularly those that are homebound, are receiving needed services. The needs of those that are socially isolated may not be detected, especially for those living some distance from a neighbor.

Not surprisingly, seniors in poorer health also reported having more difficulty with transportation. Seniors that are in poor health have trouble getting to places such as grocery stores, pharmacies, medical appointments, and even family and friends. It stands to reason that seniors in poor health will quickly deteriorate if they do not have access to medical care and prescription medication. Females reported more difficulty than males with regard to getting around in general. This can be at least partly attributed to a longer life span, and the fact that females tend to outlive their spouses; therefore, females depend on others to a greater extent than males.

A large health system in New York provides seniors who have difficulty in getting to medical appointments with house calls (North Shore-LIJ System, 2012). Due to the rise in the number of older home-bound seniors, this health system has instituded nurse and doctor visits to patients' homes. Seniors with transportation issues are more likely to feel isolated, as they cannot readily visit family or friends. Research has consistently demonstrated that isolation is correlated with further health deterioration (Cohen, 1988; DiMatteo, 2004; Helgeson & Cohen, 1996; Patterson & Veenstra, 2010; Rutledge et al., 2008; Shankar et al., 2011). There is a critical need to ensure that seniors are engaged in their communities rather than isolated. In Canada, 36% of seniors volunteer

(Statistics Canada, 2009), and initiatives such as the Elder Friendly Communities Program (EFCP) show promise in engaging volunteer seniors to contribute in a variety of areas related to community building including civic, educational, cultural, and volunteering (Austin, McClelland, Perrault, & Sieppert, 2009). This program has been successfully adapted to other areas of the world such as Australia. More of these programs should be implemented in order to lessen the negative outcomes of isolation; and just as importantly, to take advantage of seniors' untapped expertise. This is especially relevant in today's turbulent economic environment where traditional government sponsored programs cannot possibly address the growing needs of frail seniors.

Remote patient monitoring, or telehealth, is another potentially cost-effecive option for seniors with difficulty getting around. Telehealth services entail monitoring patients at home using telecommunications technology, along with medical peripherals, to to check on patients' health status and communicate with them in real-time and in the comfort of their homes. Previous studies suggest that telehealth, which has traditionally been used to medically monitor vital signs in the home care or primary care setting, may be especially beneficial in community dwelling seniors (Pekmezaris et al., 2012). Social connection through virtual visits can be provided to seniors who are homebound to address the negative outcomes of isolation.

Lastly, minorities indicated having trouble with paying for expenses related to food, housing, and transportation due to medical expenses. They were also less likely to report having assistance when compared to respondents from the main sample. It is particularly important to ensure awareness of available resources to older minority seniors, who are more likely to have experienced greater discrimination than their younger counterparts. This is further complicated by the fact that some seniors do not speak or read fluently in English and require translation of information.

IMPLICATIONS

This study sampled suburban seniors living in the New York metropolitan region, which is demographically similar to many post World War II suburbs. Therefore, the findings reported herein should be generalizable to most suburban communities of aging adults in United States, Canada, Western Europe, New Zealand, and Australia. Eventually, as other rapidly developing countries with younger suburban areas age, such as China, Brazil, Poland, and Mexico, these findings should also be useful.

The importance of understanding the needs of seniors in suburban communities cannot be overstated. Most American seniors currently reside in suburbia (Kim, 2011), and census projections show that this trend will continue as baby boomers age in place (Frey, 2010). Further senior survey research needs to be conducted to better proactively address senior needs before the exponential growth of this population overwhelms resources.

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