Today's Research on Aging

PROGRAM AND POLICY IMPLICATIONS

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Volunteering and Health for Aging Populations

In the next two decades, the number of Americans age 55 or older will swell from 76 million to 110 million as the large baby-boom generation continues to age. Older Americans' health and well-being is important for the entire society, and the longer they can live independently, the lower the social costs will be for the society as a whole. This e-newsletter provides an overview of demographic characteristics of older volunteers and highlights recent findings from research affiliates of NIA-supported centers specializing in the demography, economics, and epidemiology of aging.

Whether older Americans can delay or prevent disability associated with advanced age will depend in part on how they spend their time after retirement. A growing body of research suggests that older adults who are engaged in social and community activities maintain mental and physical health longer than other older adults (Musick and Wilson 2008). Volunteer activities are one way of remaining socially active after retirement (Luoh and Herzog 2002).

Beyond potential health benefits for the volunteers, nonprofit organizations, governments, and community groups see boosting volunteering among the increasing older population as furthering several complementary goals, including:

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This review summarizes research related to the objectives of the National Institute on Aging, with emphasis on work conducted at the NIA demography centers. Our objective is to provide decisionmakers in government, business, and nongovernmental organizations with up-to-date scientific evidence relevant to policy debates and program design. These newsletters can be accessed at www.prb.org/TodaysResearch.aspx.

- Providing services to those in need in a time of diminishing government resources.
- Helping run nonprofit organizations including churches, community groups, and political parties, and nurturing a new generation of leaders.
- Strengthening civil society by engaging more people in the community (Morrow-Howell 2010).

Many local and national government officials believe that increased volunteerism among older people would be a "winwin" situation, with multiple beneficiaries. In the United States, a 2005 White House Council on Aging called for enhanced volunteer opportunities for older Americans (Butrica, Johnson, and Zedlewski 2009), and in 2009, President Barack Obama signed the Edward M. Kennedy Serve America Act, which aims to increase volunteer service opportunities for older adults (Barron et al. 2009). Other developed countries, many aging much faster than the United States, are also attempting to harness the benefits of volunteering for their societies and for their older populations (Musick and Wilson 2008; Australian Bureau of Statistics 2010; Statistics Canada 2010; Hank and Erlinghagen 2010).

Volunteering and Aging

Volunteering is generally defined as unpaid work for or through an organization. It is distinct from informal "helping" or caregiving, in which people may assist neighbors or friends with certain tasks, such as grocery shopping, child care, or yard work. While there is often overlap, these activities appear to have different effects and involve different types of people (Hank and Stuck 2008). People who commit to formal volunteering are more likely also to engage in "helping," but not the reverse—people who help are not more likely to volunteer. For example, someone who volunteers for their church may also give informal help to a church member who cannot drive, but someone who helps their disabled neighbor will not necessarily engage in organized volunteer work.

The Bureau of Labor Statistics (BLS) estimates that, in 2010, about 25 percent of Americans age 55 or older reported that they had volunteered during the previous year, com-

Volunteerism in Other Developed Countries

Volunteerism among older persons has also attracted intense interest in other developed countries, many of which have rapidly aging populations. Volunteer rates from different countries often are not strictly comparable because of variations in how data are collected, but available data depict remarkably similar portraits of older volunteers with regard to education, work and volunteer history, age, and other characteristics (Haski-Leventhal 2009; Hank and Erlinghagen 2010).

In Australia, 2006 Census data on volunteerism show 33 percent of those ages 55 to 64 reported volunteering in the previous year, with rates dropping to 22 percent for those ages 65 to 74, and 14 percent for those age 85 or older (Australian Bureau of Statistics 2010). The 2007 Canadian Survey of Giving: Volunteering and Participating found that 40 percent of Canadians ages 55 to 64, and 36 percent of Canadians age 65 or older, volunteered in the previous year (Statistics Canada 2010). Recent surveys in England found the annual volunteer rate ranged from 41 percent of those ages 65 to 74 to 29 percent of those age 75 or older (United Kingdom 2010).

Surveys in the 1990s indicated that just over one-quarter of European adults volunteered during a year, similar to U.S. levels, but with considerable variation among countries (Erlinghagen and Hank 2005). More recent national surveys of the population age 50 or older—the Surveys of Health, Ageing, and Retirement in Europe, or SHARE—found that older northern Europeans were much more likely to have volunteered in the previous month than older southern Europeans. Just 4 percent of Greeks and 12 percent of Italians age 50 or older said they volunteered, compared with 29 percent of Swedes and 34 percent of Dutch in this age group.

The researchers suggest this gap by nationality could be linked to differences in family culture, social environments, and in welfare state regimes. In Italy, Spain, and Greece, for example, families are expected to provide the type of support and help that a volunteer organization might supply. Northern countries like Norway, Denmark, or the Netherlands have well-established state welfare systems, and this more-organized structure of social services promotes volunteering (Haski-Leventhal 2009; Hank and Erlinghagen 2010). These results underscore the effect that the social, political, and economic structure can have on older citizens' decisions to volunteer (Musick and Wilson 2008).

pared with 32 percent of those ages 35 to 44 (BLS 2009). The rate generally rises among those in their late 50s and 60s and begins to drop after age 70. In many European countries, the percentage of people age 71 or older who volunteer is one-half the rate of those ages 61 to 70 (see box)

(Haski-Leventhal 2009). In the United States, a big drop is recorded after age 80 (Boraas 2003), and in Australia after age 85 (Australian Bureau of Statistics 2010).

Older people tend to devote many more hours to volunteer activities than middle-aged and younger adults. Americans age 65 or older devoted a median of 96 hours annually, nearly two hours weekly, to volunteer activities in 2010. The median was 48 hours for Americans ages 35 to 44, and 40 hours for those 25 to 34. About 9 percent of the age 65-or-older group worked at least 500 hours the previous year, 10 or more hours a week. The median number of volunteer hours for the 65 and older population was similar in Canada and Australia—around 100 (Australian Bureau of Statistics 2010; Statistics Canada 2010).

Even if volunteer rates and the time commitments remain the same, the number of volunteers and the combined time they contribute to volunteer activities will continue to increase as populations age (Zedlewski 2007). If recent efforts to bring older adults into volunteering are successful, the volunteer ranks could swell.

Who Is Most Likely to Volunteer?

In general, older people are more likely to participate in an organized volunteer effort if they are highly educated, have higher incomes, work at least part time, are married, and have a spouse who also volunteers (BLS 2009; Boraas 2003; Morrow-Howell 2010; Rotolo and Wilson 2006, cited in Butrica, Johnson, and Zedlewski 2009).

People who have completed more education and who worked in higher-paying jobs have more skills and experience of value to organizations. They may also feel more confident about their ability to contribute in significant ways (Thoits and Hewitt 2001).

Higher income people also have more varied social connections and are more likely to be asked to volunteer (Hodgkinson 1995, cited in Wilson and Musick 1997). And, wealthier people may feel an obligation, stemming from their higher social status, to contribute time to their community. For similar reasons, people who are working are more likely to volunteer than those who are not, even though they appear to have less time for it.

In the United States, Australia, and Canada, women are more likely to volunteer than men, but men often contribute more hours when they do volunteer (Musick and Wilson, 2008; Australian Bureau of Statistics 2010; Statistics Canada 2010). However, a study of volunteering in Europe found men more likely to volunteer than women in nine out of 12 countries studied (Haski-Leventhal 2009; Hank and Erlinghagen 2010), although only in Israel was the gender gap significant.

Studies in several countries suggest that more-homogeneous populations are more likely to volunteer, because people trust others like themselves. Trust is important because people feel more comfortable volunteering if they think that others will expend as much effort as they will, that they will not have to do more than their share (Musick and Wilson 2008).

Many people are brought into formal volunteering through clubs, churches, or other organizations of which they are members (Krause 2009), thus "joiners" are more likely to become volunteers. People who volunteered in the past are more likely to do so again, and those with a history of volunteering are likely to continue longer than those who did not. Those who volunteer in older ages are often the same people who volunteered when they were younger.

People who actively practice their religion are much more likely to volunteer than people who do not. Indeed, helping with church activities is one of the most common ways older people volunteer, especially in the United States (Krause 2009; Butrica, Johnson, and Zedlewski 2009; Haski-Leventhal 2009).

Health status also determines whether an older person commits time to volunteering (Butrica, Johnson, and Zedlewski 2009). As people age, many will develop health problems or disabilities of varying severity, which can be a significant barrier to volunteering (Li and Ferraro 2006; Musick and Wilson 2008, cited in Hank and Erlinghagen 2010).

Does Volunteering Enhance Health?

Researchers have identified a range of health benefits associated with volunteer activity among older adults. However, whether people choose to volunteer is dependent on their health, making it difficult to determine the extent to which better health among volunteers compared with nonvolunteers may be attributed to volunteering itself. Among the health benefits potentially attributable to volunteering are:

- Improved Self-Reported Health. Volunteers tend to have a higher sense of self-esteem and personal control, both of which are associated with the adoption of good health behaviors. For some elderly, volunteering provides a distraction from their own physical or personal problems, encouraging a more positive attitude about their health. All these factors contribute to volunteers being more likely than others to say that they are in good or better health (Luoh and Herzog 2002; Piliavin and Siegl 2007; Krause 2009; Haski-Leventhal 2009).
- Increased Physical Functioning. Many older adults develop arthritis and other health problems that limit their ability to walk, dress themselves, and perform basic tasks necessary in everyday life (Tan et al. 2006). Regular physical activity can slow or reverse physical decline by increasing

- cardiovascular function and improving flexibility and strength, thereby slowing or reversing the effects of arthritis and other limiting conditions. Volunteering enhances physical activity because it often requires travel to and from the volunteer location and tasks that involve physical activity—for example, cooking and serving food, gardening, or interacting with children (Lum and Lightfoot 2005; Moen, Dempster-McClain, and Williams 1992).
- Better Cognitive Functioning. While many older people remain mentally alert, many others see a decline in cognitive function: Their memories are less certain, their executive planning, or ability to plan and carry out daily activities, slow down and become hampered (Carlson et al. 2009). The mental stimulation generated by planning and carrying out various volunteer responsibilities helps to slow or offset this decline (Carlson et al. 2008). Volunteering often involves interacting and coordinating plans with others, and having to execute a task on time (for example, organizing and serving food for a church function). Physical activity and cardiovascular conditioning also enhance people's cognitive functioning by, among other things, increasing brain activity (Carlson et al. 2009). A recent study using data from the Health and Retirement Study (HRS) showed that a modest amount of volunteer activity lowered the risk of hypertension, a risk factor for cardiovascular disease, renal failure, and cognitive impairment (Burr, Tavares, and Mutchler 2010).
- Reduced Depressive Symptoms. "Volunteering increases psychological well-being in part because it leads people to feel that they have an important role in society and that their existence is important"—a factor referred to as "mattering" by some researchers (Piliavin and Siegl 2007). This helps prevent or reduce depression. A Japanese study of older people found that volunteers had lower rates of depression than nonvolunteers (Sato and Demura 2003, cited in Haski-Leventhal 2009); some studies have documented similar findings for Americans (Musick and Wilson 2008; Li and Ferraro 2006).
- Longer Lives. Several studies have demonstrated that volunteering is associated with lower mortality rates and longer life expectancy. Marc Musick and colleagues (1999) found that volunteers age 65 or older had lower mortality than nonvolunteers over a follow-up period of about seven years. Luoh and Herzog (2002) found that volunteering, at least up to 100 hours a year, led to better health and lower mortality. Another study found that older volunteers in a California county had 44 percent lower mortality than others over roughly five years (Piliavin and Siegl 2007).

Early studies of one volunteer program, Experience Corps in Baltimore, suggest that even among less-healthy, poorer, and sedentary individuals, the desire to volunteer is great and volunteering can have health benefits. Results from an ongoing randomized double-blind study of Experience Corps volunteers will help determine whether the health benefits observed from volunteering are observed, regardless of initial health status. The next section presents findings from early studies of the Experience Corps program and some preliminary results of the ongoing randomized study.

Evidence From Experience Corps

The Experience Corps (EC) programs in Baltimore and a number of other U.S. cities are considered successful efforts in promoting the health and well-being of older volunteers as well as helping children in low-performing schools in low-income areas. The EC program matches older volunteers with elementary schools where they serve as tutors and mentors for students. The program aims to attain a "critical mass" of volunteers in the schools to achieve significant improvements in academic performance, school atmosphere, teacher retention, and community/parent involvement (Glass et al. 2004).

EC volunteers are recruited from neighborhoods near the low-performing schools in the program. They tend to be lower income, less educated, and nonwhite—people usually less likely to volunteer. Potential volunteers must pass a background check, participate in an initial one-week training and ongoing training related to their mentoring activities, and be willing to commit about 15 hours a week in their elementary school for the academic year. Volunteers are recruited and trained in teams in order to ensure a critical presence in the schools they serve. To offset the travel, lunch, and other costs associated with this high-intensity service, many receive a small stipend through the Americorps program.

The EC was designed to promote better health for the volunteer through three pathways:

- Physical activity such as traveling to and from the school and walking around the school building (Fried et al. 2004).
- Social engagement: interaction with teachers, EC staff, and other volunteers.
- Cognitive stimulation: tutoring students, preparing for tutoring sessions, and training (Hong and Morrow-Howell 2010; Glass et al. 2004).

The program provided a unique opportunity to assess the effects of volunteering on the health and well-being of individuals over time, as well as to measure its success in improving schools and raising students' academic performance.

In the Baltimore program, started in 1999, volunteers were 60 to 86 years of age, and predominately female and African American. A majority were high school graduates who reported fair to good health. When they started in the program, many reported mobility limitations with walking or climbing stairs; difficulty with cognitive tasks such as reading a map (Tan et al. 2009; Fried et al. 2004); and difficulty performing tests of executive planning (Carlson et al. 2008)

Increased physical activity and function

EC Baltimore volunteers who said they had little physical activity at the start of the program reported they had doubled their level after four to eight months (Tan et al. 2006; Fried et al. 2004). Those who said they were already physically active at the beginning of the program maintained or slightly increased their activity levels (Tan et al. 2006). After three years in the program, African American EC volunteers reported they walked farther (31 percent more blocks) and climbed more stairs than they had before, while a comparison group of nonvolunteers did not increase their activity (Tan et al. 2009). Volunteers burned more calories four to six months after they started their volunteer commitment, while the comparison group actually burned fewer (Fried et al. 2004). A majority of volunteers in the EC program increased their strength and energy and reduced time spent watching TV.

Volunteers who reported they were in fair health when they started in the program benefited most: They were able to walk and climb stairs faster after just four to eight months (Barron et al. 2009). Volunteers also were less likely to see a decrease in their walking speed over time than similar people in a control group.

Improved mental health and function

Based on anecdotal reports of participants, volunteering in the Baltimore EC seems to have led to improved cognitive ability and fewer symptoms of depression (Fried et al. 2004; Carlson et al. 2009). Volunteers reported that they read more books and magazines, chose more active and mentally challenging activities (such as crossword puzzles), and watched less television after they had started their volunteer commitment than they had previously. In a study of brain function, a sample of Baltimore volunteers showed increased brain activity when performing executive tasks, sharper memories, and greater ability to plan and carry out tasks after six months in the program. These results are promising because they were carried out among people at a relatively high risk of cognitive impairment, according to tests administered to the older adults before they started their volunteer commitment. The results demonstrated the

potential for a volunteer program to improve cognitive and brain health by increasing cognitive, physical, and social activity (Carlson et al. 2009).

Better overall health

Measured improvements in physical and mental health, along with the social interactions with other volunteers, students, and school personnel all contributed to volunteers having better (or at least the same) overall health as they did before starting the program. Even maintaining health may be considered successful because many volunteers already had conditions that worsen with advancing age. The results also suggested that people in fair health benefited more from the EC volunteer schedule and activities than those who initially reported being in good or excellent health.

Benefits to the children and schools

The EC program also appears to have attained its other major goals: to improve academic performance and school functioning. To attain the critical mass necessary to have an impact on classrooms and the school, at least one volunteer was assigned to each EC classroom, with additional EC volunteers in the library or administrative offices. The aim was to free some of the teachers' time in the classroom as well as to enrich the experiences of individual students.

While some teachers and administrators were initially skeptical about whether these older, inexperienced volunteers would help rather than hinder their activities, most came to accept and value them. Many teachers and school officials reported the experience had changed their opinion about older volunteers. In these low-performing schools often plagued by behavior problems, many teachers felt that the EC tutors helped create a positive atmosphere conducive to learning.

There were also more objective measures of success. Children in classrooms with EC volunteers scored higher on standardized reading tests (Morrow-Howell 2010). Kindergarten students in EC classrooms increased their vocabulary and knowledge of the alphabet (Rebok et al. 2004). Compared with other schools, fewer children in EC schools were referred to the main office for misbehaving. Office referrals fell by 50 percent in two of the EC schools, and by 34 percent in another (Rebok et al. 2004).

The Benefits of Volunteering

Findings from the EC and surveys in the United States and abroad have contributed a body of evidence that suggests volunteering might enhance the well-being of older people, and that programs might be designed to capitalize on those elements of the volunteer experience that lead to better health.

The EC results also suggest that lower-income adults may be recruited into intensive volunteer programs, and that they too see real improvements to their health.

Volunteering is also a productive activity that enhances valuable human resources and relationships in the community at large (Wilson and Musick 1997; Van Willigen 2000). Broader efforts to bring older people into volunteering and to retain volunteers for longer might provide both health and social benefits for countries facing rapidly aging populations. However, much of the research on volunteering has not yet taken into account the fact that healthy people are more likely to be volunteers. To inform decisionmakers about the public health benefits of volunteer commitments, future research must be able to identify what the benefits of volunteering would be if the decision to volunteer were independent of initial health status.

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The NIA Demography Centers

The National Institute on Aging supports 14 research centers on the demography and economics of aging, based at the University of California at Berkeley, the University of Chicago, Duke University, Harvard University, Johns Hopkins University, the University of Michigan, the National Bureau of Economic Research, the University of Pennsylvania, Princeton University, RAND Corporation, Stanford University, Syracuse University, the University of Southern California/ University of California at Los Angeles, and the University of Wisconsin-Madison.

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www.ssc.wisc.edu/~jpiliavi/index.htm

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www.jhsph.edu/agingandhealth/research/projects/ Experience_Corps_pages/index.html

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