The La Crosse County Senior Dining Program: Implications for the Elderly Population in La Crosse County

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ABSTRACT

"Almost 15 percent of the nation's elderly face the threat of hunger" (Lieberman, 2013). From April 2013 to March 2014, the La Crosse County Senior Dining Program has served over 104,000 meals to 1,371 individuals. Food insecurity is often the primary motivation for utilizing subsidized meal programs offered by state and local governments, but is food insecurity the only motivation? By analyzing data from almost 100 USDA Adult Food Security Surveys collected in La Crosse County, we measured seniors' levels of food insecurity in addition to the frequency with which they utilize the La Crosse County Senior Dining Program. We conclude that the availability of the meal site program sponsored by the La Crosse County Aging Unit has allowed senior citizens in the community to sustain a program that builds individual health, social capital, and broader community health.

INTRODUCTION

It is apparent that programs providing nutritional meals to seniors have a positive effect on participants' individual, physical health. However, programs that take place at meal sites offer participants added benefits. Martin, Rogers, Cook, and Joseph (2004) state that social capital is tied to food security; therefore it is important to provide programs that increase or promote social capital in order to build food security in all populations. Increasing one's social capital has positive health outcomes (Dean and Sharkey, 2011; Ferlander, 2007; Li and Ferrara, 2006; Martin, Rogers, Cook, and Joseph, 2004; Meier and Stutzer, 2008). Social capital can be increased by improving one's social networks and social support; meal sites in La Crosse County offer participants the opportunity to do just that.

Social capital can also be improved by increased civic engagement, most notably through volunteering (Dean and Sharkey, 2011; Einolf, 2009; Ferlander, 2007; Li and Ferrara, 2006; Meier and Stutzer, 2008; Mutchler, Burr, and Caro, 2003; Nesbit, 2011; Tang, 2008; Tang, Choi, and Morrow-Howell, 2010). Nesbit cites Okun and Schultz (2003) when pointing out that seniors motivations for volunteering may be different than the motivations of younger people; "older people report that they volunteer to feel useful or to make social connections" (2011). Those who volunteer for the La Crosse County Senior Dining Program are often seniors themselves and experience positive health outcomes and increased social capital as a result of volunteering.

These generalizations provided a framework within which to conduct our research. We found that the La Crosse County Senior Dining program has allowed senior citizens in the community to sustain a program that builds individual health, social capital, and broader community health.

Definition of Terms

For the purpose of this paper, several terms will be defined in this section. In this paper, the terms "seniors" and "elderly" will be used interchangeably to describe someone over the age of 60. We will use Ferlander's (2007) definition of "social capital." Ferlander states that "according to many scholars, social capital comprises social networks, norms of reciprocity or social support and social trust" (2007). We will use the American Psychological Association's definition of "civic engagement." "Civic engagement" is "individual and collective actions designed to address issues of public concern" (2014). One of the most prominent aspects of "civic engagement" is volunteering, therefore "volunteering" and "civic engagement" may be used interchangeably in this paper.

METHODS

Our group conducted quantitative research to establish a better understanding of the current health and wellbeing of seniors who participate in the La Crosse County Senior Dining Program. With guidance from Dr. Carol Miller, we collected data by way of one-on-one interviews, using a modified version of the USDA Adult Food Security Survey. This survey was approved by the UW-La Crosse IRB. Before interviewing, all individuals were given the right to freely choose whether or not to partake in the survey. It took less than ten minutes to complete for the majority of respondents. There are eleven meal sites all together that participate in the Senior Dining Program, however we were only able to conduct interviews at one meal site (Sauber Manor). Volunteers from Dr. Carol Miller's classroom conducted all other meal site interviews, except at the Hmong Mutual Assistance Association (HMAA) meal site. In total, there were close to 100 surveys collected.

Survey Instrument

The survey was divided into three sections. The first section asked questions regarding food intake, with the first half asking general household information such as "How many adults live in your household?" and "How many children under age 18 live in your household?" The second half was a series of ten statements or questions pertaining to the prevalence of hunger and food insecurity of the individual. Respondents were able to express the degree to which they agreed with the statements or questions on a three-point scale. Some of the statements were, "I worried whether my/our food would run out before I/we got money to buy more in the last 12 months," "I/we couldn't afford to eat balanced meals in the last 12 months," "In the last 12 months, did you or other adults in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?," and "Sometimes people lose weight because they don't have enough to eat. In the last 12 months, did you lose weight because there wasn't enough food?" The individual could reply with "often true," "sometimes true," "never true," or "don't know." The last question of this section asked, "How often did this happen - almost every month, some months but not every month, or in only 1 or 2 months?", in which case the individual would answer accordingly.

The second section was focused on nutrition, asking how often the individual consumed certain foods such as dairy, meat, carbohydrates, and sweets. The scale ranged from 2-3x/day, 1x/day, 2-3x/week, seldom, to never. The individual would check the appropriate box accordingly. The next two questions dealt with food insecurity and financial issues. Participants were asked, "Here are some reasons why people don't always have enough to eat. Which of the following apply to your household?" To name a few, the individual could circle not enough money for food, too hard to get to the store, on a diet, or not able to cook or eat because of health problems. There was also an option to specify other reasons if none of the options were fitting to describe the individual's situation. The last question asked, "Why do you not have enough money for food?" Again, the individual could choose from a list of preset answers, or specify other reasons they see fit.

The third and final section of the survey collected general demographic information such as age, marital status, education level, sex, and household income. Additionally, it requested the participant specify the community in which the individual resides, which senior meal site he/she attends, and how frequent the individual attends the meal site. The scale was less than once a month to 5 days per week.

Once the surveys were completed and collected, the data was entered onto an excel spreadsheet and turned over to Dr. Carol Miller for data analysis. The method Dr. Miller used to run the analysis was an Analysis of Variance (ANOVA). The results are discussed below in the results section.

In addition to conducting survey interviews, Jordan and Nou performed an interview with the Director of the La Crosse County Aging Unit, Noreen Holmes, to learn more about the past, present, and future of the Senior Dining Program. Here they asked questions such as, "How is the program funded?", "What is the outlook for the future of this program?", and "How has the recent budget cuts affected your department?" The interview was informal and lasted approximately 30 minutes.

RESULTS

Almost one hundred (98) surveys were collected over the course of several weeks. However, out of ninetyeight surveys, only ninety-five provided enough answers to the questions to allow for proper data analysis. In addition, data from two meal sites were never accounted for, as the surveys were never properly returned to Dr. Miller by those who administered the surveys. Therefore our data excludes these missing surveys. Furthermore, no survey interviews were conducted at the Hmong Mutual Assistance Association (HMAA) meal site, leaving out an important senior population from our data. Nevertheless, it is safe to assume the data we collected is sufficient for representation of the Senior Dining Program participants as a whole. With respect to demographics, there was a disproportionately larger number of female than male respondents, with 71 females and 27 males. The largest portion of respondents (39%) was divorced/separated while the remainder was widowed (37%), married (18%), and/or never married (6%). The measure of education level ranged from grade school (5, 6, 7, 8) to college (13, 14, 15, 16), with an average education completion of 12.24 years. The highest education level reported was 16 years and the minimum was 7 years, with a standard deviation of 2.13. When looking at annual household income, the majority of seniors (66%) earned at or less than \$14,100 while 34% earned \$14,101 or more.

Related to meal site participation, 31% of seniors reported attendance five days a week, while 34% reported attendance less than once a week. The data also shows a significant association between income and frequency of meal site participation. Based on the results of Figure 1, the sum of individuals who earned less than \$14,100 (annually) are more likely to participate in a meal site than the sum of those who earned \$14,101 or more. Additionally, there was no significant difference between those who went to the meal sites more often and those who did not in terms of education. This is shown in Figure 2.

Frequency of Meal Site Participation According to Annual Household Income



Figure 1. Number of individuals reporting meal site participation of *less than once a week* or *at least once a week* according to annual household income

Mean Education Level by Frequency of Meal Site Participation



Figure 2. Respondents' mean education level according to the frequency of their meal site participation

Related to social capital, those who participated in meal sites less than once a week were more food insecure than those who went at least once a week, as graphed in Figure 3. Additionally, divorced/separated respondents were more food insecure than married individuals and the lowest income group had the highest food insecurity.

Mean Food Insecurity Score by Frequency of Meal Site Attendance



Figure 3. Respondents' mean food insecurity score according to the frequency of meal site participation

Furthermore, we were able to gather additional information from the interview with Noreen Holmes. When asked about the future outlook of the Senior Dining Program, Noreen expressed concern. Recently, her department had to cut \$30K from their budget due to sequestration, which led to an early retirement for one of her employees. As such, their department now shares a larger workload amongst each other. In terms of funding, we learned that the La Crosse Senior Dining Program came into existence under the federal Older American's Act (1965), which provides financial aid for food services to senior citizens age 60 and older. According to Noreen, more than the matching amount from La Crosse County is given to the Senior Dining Program. She also explained that they ask the participants for \$3.25 per meal or whatever the participant would be able to afford. The program never turns anyone away based on inability to pay. Noreen stated that many people actually pay more than \$3.25 per meal, which is important for our idea of social capital and senior citizens aiding in supporting the elder community as a whole. All money that is collected from the meal sites goes back into the program and is not used for other La Crosse County aging services. The total amount of money collected from April 1st, 2013 to March 31, 2014 was \$348,095. This served 1,371 participants and all together 104,508 meals. The food sites do not record the amounts that each participant pays, so we are unable to report that information. However, by dividing the total amount collected from the participants by the number of meals served, the average amount paid per meal is roughly 3.31 which means on average, people are paying more than the requested amount of the subsidized meal. Citing Noreen in a correspondence email, she writes "most older people want to pay and many are generous as they realize the importance of the meal program" (2014).

Those participating in the food site were not only generous in their monetary giving, but also with their time. Noreen said that almost all of the participants were also volunteers, and helped with the food preparation, serving and cleaning up, which helped keep the program running as it reduced cost of labor. All of the above reasons – the healthy meals, coffee time before and after the meal to allow for socialization, individuals paying more than the "cost" of their meal, and the contributions of participants in terms of volunteering – correlate with positive social capital that helps raise the health of the individual participants and for the community as a whole.

DISCUSSION

We have found that the La Crosse County Senior Dining Program has an effect on both program participants and those who volunteer to sustain the program. Participants benefit from the program in terms of improved physical health, increased social capital, and enhanced community well-being. All three are very interconnected; individual health increases one's ability to build social capital, while social capital often improves individual health. Both individual health and social capital increase a community's well-being. However, good communities can also increase individual health and social capital. Those who volunteer for the Senior Dining Program are often seniors themselves. Volunteers often experience improved individual health and increased social capital. These two contribute to a community's well-being. The La Crosse County Senior Dining Program allows senior citizens in the community to sustain a program that builds individual health, social capital, and broader community health. In our discussion, we will cover each of these benefits separately for participants in the program and volunteers of the program.

La Crosse County Senior Dining Program Participants

Those who utilize Senior Dining Program in La Crosse County do so for many reasons, however, these individuals are affected in three distinct areas. Participating in the La Crosse County Senior Dining Program has an effect on individual health, individual social capital, and community well-being.

Individual Health. The La Crosse County Senior Dining Program and access to healthy living resources contributes to the health of the individual who is participating. As mentioned with the visit with Noreen Holmes of the La Crosse County Aging Unit, all the meals must be follow USDA regulations for what constitutes a healthy meal. Noreen gave us print outs that the La Crosse County Aging Unit creates and mails out to the senior citizens in the community. Each site has its own "menu" list of what will be served every day for the month and is reminiscent of what public schools print out for their student "hot lunch" programs. By providing the correct nutritious food, the Senior Dining Program is a great nutritional supplement for individual participants. Many individuals would not be able to afford nutritious meals if it weren't for the La Crosse County Senior Dining Program. The majority of participants' annual household income is \$14,100/year or below (86 of 98 participants who listed their income) (See Figure 4).



Household Income

Figure 4. Respondents' annual household income

The federal poverty level of a single adult is \$11,670 (Wisconsin Department of Health Resources 2014). According to Noreen Holmes, the senior citizens who are living in La Crosse County and participate in Wisconsin's food stamp program on average receive \$16/month for food. With low annual incomes and high living costs, healthcare and other costs, and an average of less than \$20/month for food stamp recipients, the Senior Dining Program is providing healthy foods for citizens who may be unable to afford nutritional foods.

The La Crosse County Senior Dining Program also has nutritional demonstrations that show proper food preparation and how to make balanced meals. By showing the seniors how to prepare their own meals, they are less likely to rely on pre-made, processed meals. Lastly, the sites provide coffee before and after the meal. Noreen Holmes said that this promotes an environment of socialization.

All aspects of health are interrelated. The definition of health according to the World Health Organization is "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (2003). By providing a location for senior citizens to partake in a meal and socialize among peers, the La Crosse County Senior Dining Program is supporting improvement of health not only nutritionally, but socially. This social health can go on to affect physical health. "Active engagement in social roles also promotes social support, social interactions, and other psychosocial resources that enhance resilience in the face of disease" (Li & Ferrara 2006).

When looking at the survey data, we see that the majority of participants are single, divorced or widowed (See Figure 5).



Marital Status of Respondents

By providing a place for individuals to socialize, the Senior Dining Program is providing a space for people to create social bonds who may be unable to socialize at home. Widowhood and divorce are high stress factors on an individual, but socialization among peers may help relieve the worst depressive symptoms. "Having a strong social network not only helps divorcees to adjust positively to divorce, but these relationships can also serve to prevent symptoms of maladjustment" (Krumrel, Colt, Martin, Fogo, & Mahoney, 2007).

The La Crosse County Senior Dining Program helps to improve multiple facets of individual health. By providing healthy meals and the opportunity to socialize, the Senior Dining Program is improving individual health for many La Crosse County seniors.

Social Capital. In La Crosse County, meals provided for seniors in the county are not free. Although no one will be denied a meal on the basis of a donation, participants are strongly encouraged to contribute what they are able. All meals offered at nutrition/meal sites have a suggested donation of \$3.25. As was explained previously, the average donation per meal was \$3.31 in 2013. This average indicates that, in general, those visiting the meal sites can afford the program. If program participants are able to afford the program, they may have the financial means to provide food for themselves if the program was eliminated. If this is assumed, it can be concluded that participants are visiting meal sites to fulfill needs that are not strictly financial or hunger-related.

Martin, Rogers, Cook, and Joseph (2004) have found that social capital is tied to a decreased risk of hunger. Those with high levels of social capital have strong support systems and close ties with those in their communities. One important way to build social capital is by interacting with others in the community. Ferlander (2007) mentions that "at the individual level, social capital is often measured through questions about social connectedness and social support." This means that those with high levels of social capital are more likely to be able to rely on a neighbor to pick up groceries for them when they are sick, lend them a car to drive to the store when theirs breaks down, or allow them to borrow money to purchase groceries in a pinch. Access to food and the ability to obtain food by

Figure 5. Respondents' marital status

utilizing one's social capital is positively correlated to increased levels of food security (Martin, Rogers, Cook, & Joseph, 2004).

Nutrition/meal sites in La Crosse County offer visitors more than a balanced meal. Each of the 11 nutrition/meal sites offers opportunities to socialize, play games, and learn about health issues facing the aging. It could be inferred that participants come to meal sites primarily to socialize as opposed to solely attending to meet financial or hunger-related needs (See Figure 6).

Food Insecurity Levels According to Marital Status, Household Income, and Meal Site Participation



Figure 6. Respondents' total food insecurity score according to marital status, household income, and meal site participation

Martin, Rogers, Cook, and Joseph point out that the connection between social capital and food security is circular. "It is important to consider aspects of social capital when working to build food security and prevent hunger" as each component is dependent on the other (Martin, Rogers, Cook, and Joseph, 2004). If meal sites were eliminated for any reason, it is likely that, regardless of whether or not food is still provided to seniors on an individual basis, food insecurity would grow. The ability to build social capital at the meal sites is essential to keeping levels of food insecurity in La Crosse County low.

Community Well-being. The Senior Dining Program contributes to the well-being of La Crosse County. As mentioned previously, the Senior Dining Program offer venues for program participants to gather and socialize. In addition, the program offers an opportunity for community educators to take advantage of the large gathering. It is common for the La Crosse County Aging Unit to organize speakers or presentations for those who attend the meals in order to educate participants on issues facing the aging La Crosse County populations. In addition, meal sites are an opportunity for the County to share information about the other services they offer that participants may be interested in utilizing. Ferlander (2007) states that "members of wide networks are well informed of health issues." Martin, Rogers, Cook, and Joseph (2004) affirm the importance of meal sites and other community gathering spaces by stating "community centers can help build an environment where social capital, and ultimately food security can grow."

La Crosse County recognizes the importance of these meal sites. For a county with a population of only around 116,000, there are 11 meal sites. That's one for every 10,000 residents (only a portion of which are over 60 years of age) or one meal site per 40 square miles. Noreen Holmes mentioned that the number of sites in La Crosse County is large for the size of the community but noted that they do not want to make it difficult for anyone to make it to the meal sites. La Crosse County recognizes the importance of meal sites because alternatives are far more costly. They frequently remind community members and program participants that "a year's worth of home-delivered meals costs

less than one day in the hospital." By providing meals, community health education, and informing participants of services available to the elderly, La Crosse County effectively provides for the general well-being of the community.

The La Crosse County Senior Dining Program provides many benefits for participants. Seniors are able to receive an inexpensive, nutritional meal to help them maintain good health. In addition, participants have the opportunity to socialize with peers at the meal sites promoting both individual health and helping them to build social capital. Lastly, the Senior Dining Program promotes community well-being as meal sites provide an opportunity to educate participants and encourage the strengthening of community ties.

La Crosse County Senior Dining Program Volunteers

Volunteering has an effect on those who give their time and ability to support a cause. Noreen Holmes believes that over 95% of all volunteers at nutritional/meal sites in La Crosse County are over the age of 60. The Senior Dining Program, therefore, have a positive impact on not only meal recipients but those who volunteer for the program as well.

Individual Health. There has been extensive research performed on the subject of civic engagement. When researching the Senior Dining Program in La Crosse County, we found that many participants not only receive the benefits, but also help maintain the program by volunteering to ensure the program is sustainable. For the elderly community, health is a large concern and individuals engage in a number of activities to improve their individual health. Individual health has implications for individual food insecurity, as well as individual civic engagement. However, civic engagement has an effect on individual health as well. Volunteering, a form of civic engagement, is one way to increase individual health. Research conducted by Mutcher, Burr, and Caro focuses on formal and informal volunteering among seniors; they mention that "enhanced health and life satisfaction, improved self-esteem and psychological well-being, and benefits to longevity associated with volunteering have been established in the literature" (Mutcher, Burr, and Caro, 2003). Stephen Meier and Alois Stutzer concluded that volunteering is "positively correlated with physical and mental health" (2008). Research is consistently reaffirming that volunteering has huge health benefits.

Social Capital. Not only do we see a rise in the physical health of the elderly that are civically engaged, but we also see a huge increase in the social capital of those individuals. As has been mentioned, the meals sites have provided a great way for the elderly to build their social networks. Many of the people who were interviewed during our research were widowed or divorced (See Figure 5). Individuals who live alone often feel the need to increase their inner circles to non-kin relationships through civic engagement. Individual health amongst the elderly can often be improved through increased social capital and ability to network. "High social capital is associated with positive health outcomes" (Dean and Sharkey, 2011). "High social capital" is often created through civic engagement opportunities such as volunteering. Rebecca Nesbit studied the different motivations for volunteering and if certain life events play a major role in their choice to volunteer. She specifically looks at four different hypotheses that may occur during a life cycle: The birth of a child, divorce, the death of a spouse, and the death of a non-spousal member. She mentions in her research "that volunteering helped to lower the depression rates of people above the age of 65, because their volunteering helped them to feel more socially integrated" (Nesbit, 2011). Many of the elderly included in our study were the only individuals in their household. Those who may not have the opportunity to socialize within their own household can satisfy that need by volunteering. A majority of the research mentions that the elderly are a key demographic in civic engagement because many seniors are retired, giving them more time for such activities. The meal sites provide the ability to network as a participant, but also as a volunteer. Participation and volunteering allows individuals to network in multiple ways which can give them satisfaction regardless of how they choose to participate in the program.

Community Well-being. As individual health is improved with increased social capital, it is no surprise to find that increased social capital contributes to broader community health. The La Crosse County Senior Dining Program plays a huge role in improving the social capital of the community. As was mentioned, social capital is often created through volunteering and other forms of civic engagement. Civic engagement is important to the well-being of a community. Without people who volunteer their time or money for programs such as the La Crosse County Senior Dining Program, there would be a decline in the overall well-being of La Crosse County as a whole. Groenou, Komp, & Tilburg (2011), authors of "Age, Retirement, and Health as Factors in Volunteering in Later Life," found that public officials can increase the number of elderly volunteers in a community by improving elderly programs; "older people not only benefit from voluntary action but also have a place among the volunteers themselves." Civic

engagement among the elderly sustains the La Crosse County Senior Dining Program, and the positive effects span far past the meal sites. The Senior Dining Program is able to sustain itself with a predominantly elderly group of volunteers and through donations provided by the participants. In terms of both volunteers and financial support, the program is almost entirely self-sustaining. This has very positive implications for the community as a whole, as time and funding can be focused on other worthy programs.

Aspects of civic engagement can improve individual health. Volunteering has positive effects on both physical and social health. As physical and social health improve, community well-being also improves. The La Crosse County Senior Dining Program offers seniors not only nutritional meals, but an opportunity to be engaged in their community by volunteering.

In La Crosse County there has been some talk of cutting the budget for the Senior Dining Program. We argue that a decline in funding for these programs would have negative effects on the health of our community. The elderly who are truly reliant on the program would not be able to obtain the nutrition and meals they need to survive and be healthy. In addition, senior's social networks would dwindle resulting in decreased food security and physical health. As we mentioned earlier "a year's worth of home-delivered meals costs less that one day in the hospital." Dean and Sharkey (2011) claim that "food insecure individuals who express low levels of social capital may have formed negative impressions of their community based on a lack of sufficient distributional or reciprocal resources within their community, or an inability to access these resources." When officials begin to cut programs that are almost entirely self-sustaining, such as the La Crosse County Senior Dining Program, the health of our community, both physically and socially, is in jeopardy. Since elderly individuals partake in both aspects of the program, both utilizing the program and sustaining the program through donations and volunteering, they have a greater stake in survival of the program and would be affected greatly if the program were cut or eliminated.

LIMITATIONS

We did not receive some of the survey results prior to the creation of this paper. With collaboration between Dr. Carol Miller of the UW - La Crosse Sociology department and the La Crosse County Aging Unit, the surveys had been mailed to residents in order to increase the total numbered surveyed in La Crosse County. Dr. Miller had also sent out surveys to two meal sites and did not receive the surveys. These numbers could have helped with more accurate data. In total, there were 98 surveys collected, three of which were missing some information. To make sure we include the diversity of La Crosse County, surveys could also be distributed to the Hmong Mutual Assistance Association. More completed surveys and data that was representative of all meal sites would improve this study.

The survey questions also did not ask the La Crosse County Senior Dining Program participants about their volunteering habits, we only utilized the information given to us by Noreen Holmes. We include these aspects in our "Future Research" section.

FUTURE RESEARCH

In the future it would be beneficial to know the reasons participants utilize the meal sites. It would be interesting to note what participants self-identify as the main reason they attend the meal sites. We would be curious to see if participants go to meal sites primarily to receive meals, to chat with friends or peers, or to learn about other services and health-related issues. At this time we can only infer, by looking at donations collected, that the primary reason people utilize the meal sites may not be to receive an inexpensive meal. It would be insightful to gather concrete data on motivations for attending meal sites.

While Noreen Holmes was able to provide general numbers of how many meals had been provided and a lump sum of money that had been donated by program participants over the course of a year, it would have been helpful to know whether those surveyed had donated when receiving meals. It would be helpful to understand how many give more than \$3.25, exactly \$3.25, less than \$3.25, or cannot contribute monetarily when they visit. These numbers would tell us whether there is a few who cover the costs of many or if everyone generally contributes "their share."

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