Factors Associated with Oklahoma Older Americans Act Nutrition Program Participants Ability to Shop, Cook and Feed Themselves

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More than anything, older adults want to remain healthy and independent. Good nutritional status can improve older adult’s health which can help them remain independent and improve their quality of life. In a previous study by Quigley et al. (2005) evaluating 18,488 congregate and home delivered meal participants, 66% and 86% of participants who scored at moderate and high nutritional risk, respectively, answered “yes” to the NSI Checklist statement “I am not always able to shop, cook and feed myself.”. Older adults’ food intake has been reported to be affected by many factors such as social interactions, finances, emotional well-being, transportation and living arrangement. However, literature is limited related to the relationship of these factors with older adults’ ability to shop, cook and feed themselves.

The purpose of this study was to evaluate the association of theoretical factors (mobility, social interactions, finances, emotional well-being, transportation, living arrangement and appliances) with Oklahoma Older Americans Act Nutrition Program (OAANP) participants’ ability to shop, cook and feed themselves. The results of this study will enable the Oklahoma Department of Human Services, Aging Services Division (OKDHS ASD) to target programs and services related to participants’ ability to shop, cook and feed themselves, which could help to reduce participants’ nutritional risk and increase their ability to maintain independence.

Data were collected using a project survey containing the NSI Checklist statement “I am not always able to shop, cook and feed myself” and items from the U.S. Administration on Aging (AoA) Performance Outcomes Measures Project (POMP) surveys related to the theoretical factors; mobility, social interactions, finances, emotional well-being, transportation, living arrangement and appliances. All survey items were modified to pose yes/no responses. Volunteer OAANP site managers and outreach workers were contracted to complete the project survey with congregate and home delivered meal participants by in-person interviews to avoid problems if participants did not understand a survey item or if they had difficulty reading or writing.

Chi-square analyses were used to evaluate differences in participants’ reported ability to shop, cook and feed themselves (SCF response) between type of meal program. Factor analysis with varimax rotation was conducted to determine which survey items loaded into construct factors. Construct factor scores were computed so a lower construct factor score represented lower functionality. T-test procedure was used to evaluate differences in construct factor scores
between type of meal program and differences in construct factor scores between participants’ SCF response by type of meal program.

Logistic regression with backward elimination was conducted to determine which construct factor scores were most strongly associated with participants’ SCF response by type of meal program. Eight hundred and fifty-nine participants volunteered to participate in this study; 477 (56%) congregate and 382 (44%) home delivered. A significant difference was observed in participants’ reported ability to shop, cook and feed themselves (SCF response) between the type of meal program.

Eight percent of congregate meal participants compared to 82% of home delivered meal participants reported they were unable to shop, cook and feed themselves. As a result, data are reported by type of meal program. Construct factors identified from the factor analysis with varimax rotation were defined as “Mobility,” “Social Interaction,” “Emotional Well-Being,” “Living Arrangement,” “Financial Security,” “Financial Management” and “Appliances.” Differences in construct factor scores between types of meal program were observed. Participants receiving home delivered meals had significantly lower mean “Mobility,” “Social Interaction” and “Financial Security” construct factor scores compared to congregate meal participants.

Differences in construct factor scores between participants’ reported ability to shop, cook and feed themselves (SCF response) by type of meal program were also observed. Participants receiving congregate meals who reported they were not able to shop, cook and feed themselves had significantly lower mean “Mobility,” “Financial Management,” and “Financial Security” construct factor scores. Participants receiving home delivered meals who reported they were not able to shop, cook and feed themselves had significantly lower mean “Mobility,” “Living Arrangement,” and Financial Security” construct factor scores; however, they had significantly higher mean “Social Interaction” construct factor scores. Best-fit logistic regression models identified construct factor scores most strongly associated with participants’ SCF response by type of meal program. For congregate meal participants, the best-fit logistic regression model indicated lower “Mobility” construct factor scores and lower “Financial Management” construct factor scores were significantly associated with lower SCF responses. For home delivered meal participants, the best-fit logistic regression indicated lower “Mobility” construct factor scores and higher “Social Interaction” construct factor scores were significantly associated with lower SCF responses.

Congregate and home delivered meal participants who reported they were not always able to shop, cook and feed themselves had significantly lower “Mobility” construct factor scores. In addition, lower “Mobility” construct factor scores were significantly associated with lower SCF responses in the best-fit logistic regression model for both congregate and home delivered meal participants. Programs and services to improve these reported problems may include senior driving classes, chore services to improve the interior and exterior home environment to accommodate a disability, and access to assistive technology.
Congregate and home delivered meal participants who reported they were not always able to shop, cook and feed themselves had significantly lower “Financial Security” construct factor scores. Congregate meal participants also had significantly lower “Financial Management” construct factor scores. In addition, lower “Financial Management” construct factor scores were significantly associated with lower SCF responses in the best-fit logistic model for congregate meal participants. These financial security issues may indicate a need for financial management classes to address preparing and purchasing nutritious meals on a budget, making food dollars stretch, applying for additional food assistance programs, applying for discount prescription cards, applying for a reverse home mortgage, asking utility companies to average bills or reassess the due date, and accessing free or reduced cost public transportation in order to improve financial security.

Although, home delivered meal participants as a whole had lower “Social Interaction” construct factor scores than congregate meal participants; home delivered meal participants who reported they were not always able to shop, cook or feed themselves had significantly higher “Social Interaction” construct factor scores. Additionally, higher “Social Interaction” construct factor scores were significantly associated with lower SCF responses in the best-fit logistic regression model for home delivered meal participants. This observation may indicate home delivered meal participants who live alone and are not always able to shop, cook and feed themselves find it necessary to establish greater social interaction in order to overcome their inability to shop, cook and feed themselves. It is important to note that home delivered meal participants often receive other services outside of the meal program and it is probable that these services provide additional social interaction.

The association of social interaction with participants’ ability to shop, cook and feed themselves may indicate a need to provide programs addressing establishing social networks for both home delivered meal participants and the community as a whole. In addition, it may be important to include home delivered meal participants’ network of informal caregivers in educational programs. Informal caregivers are responsible for providing a substantial amount of care for older adults that support good nutrition, including shopping, cooking and feeding. Education for informal caregivers related to promoting good nutritional is needed. Many informal caregivers lack the information and skills on providing encouragement to eat, modifying food consistency or use of nutritional supplements.