



Published in final edited form as:

J Appl Gerontol. 2008 ; 27(1): 110–117.

Willingness to Use a Nursing Home: A Study of Korean American Elders

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Abstract

This study explored predictors of willingness to use a nursing home in Korean American elders. Andersen's behavioral health model was adapted with predisposing factors (age, gender, education, length of residence in the United States), potential health needs (chronic condition, functional disability, self-perceived health), and network-related enabling factors (marital status and living arrangement, family network, having someone close living in a nursing home). Among 427 participants, 45% reported their willingness to use a nursing home. Logistic regression analysis showed that the likelihood of willingness increased when individuals had poorer perceived health and had a close other living in a nursing home. Findings indicate that (a) self-perceived health serves as a proxy for future needs for long-term care services, and (b) indirect exposure to formal care is an important enabler for more acceptance of nursing home use. Implications of the findings and further directions for research are discussed.

Keywords

willingness to use a nursing home; Korean American elders

Over the past three decades, the number of nursing home residents who are members of minority groups has more than tripled (Agency for Health Care Administration, 2006; National Center for Health Statistics, 2006). In response to projections for dramatic increases in the overall numbers of non-White populations, the utilization of long-term care services in minority elders has emerged as an area of concern. Past research has consistently found that minority elders are less likely to use long-term care services than their non-Hispanic White counterparts, and this pattern persisted even after controlling for socioeconomic and health status (Mui, Choi, & Monk, 1998; Wallace, Levy-Storms, Kington, & Andersen, 1998). In particular, service underutilization is pronounced in Asian populations (McCormick et al., 2002; McCormick et al., 1996). The topic of long-term care utilization in Asian Americans is especially timely in light of their exponential population growth and unique cultural

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characteristics. Although currently making up approximately 4% of the total U.S. population, Asian Americans are projected to reach 10% by 2050 (U.S. Census Bureau, 2000).

Given the heterogeneity of Asian Americans, which encompasses more than two dozen ethnic groups, this study focused on its fourth largest subgroup: Korean Americans. Census 2000 tallied more than one million Korean residents, representing an increase of more than 1500% since 1970 (U.S. Census Bureau, 2000). A majority of Korean Americans immigrated to the United States after the Immigration Reform Act of 1965 (Hurh & Kim, 1984). Due to their relatively recent history of immigration, the proportion of Korean Americans aged older than 65 is currently 6%, but its continuous increase is projected (U.S. Census Bureau, 2000).

Culture plays an important role in shaping individuals' attitudes toward long-term care services (Mui & Burnette, 1994; Mui et al., 1998; Wallace et al., 1998). Traditional norms in many Asian countries, such as familism and filial piety, have contributed to the general reluctance to long-term care and served as a major barrier to service utilization (Kim & Kim, 2004). In a national survey in Korea, about 19% of older Koreans expressed a willingness to enter a long-term care facility (Kim & Kim, 2004). Preference for long-term care among Korean Americans is in its early stage of exploration (e.g., Min, 2005), and the purpose of this study is to examine community-dwelling Korean American elders' willingness to use a nursing home and its associated factors.

Because an adequate assessment of factors influencing willingness to use a nursing home needs to cast a broad net, we adopted the behavioral health model proposed by Andersen (Andersen, 1995; Andersen & Newman, 1973) as a conceptual and analytic guideline. The model, with its explanatory variables of predisposing, need, and enabling factors, has been applied to long-term care utilization (e.g., Kim & Kim, 2004; Wallace et al., 1998). With the willingness to use a nursing home as the outcome criterion, predictors were assessed with an array of variables including predisposing factors (age, gender, education, length of stay in the United States), potential health needs (chronic condition, functional disability, self-perceived health), and network-related enabling factors (marital status, living arrangement, family network, having someone close living in a nursing home).

Method

Sample

The sample was drawn from a cross-sectional study of community-dwelling Korean American elders in Tampa and Orlando conducted between October 2005 and May 2006. To be eligible for the survey, participants had to be Korean adults aged 60 or older who had sufficient cognitive ability to understand and complete the survey. Using multiple sample recruitment strategies, data from 472 Korean American elders were collected through site visits and mail surveys. A detailed description of the study can be found elsewhere (e.g., Jang, Kim, Chiriboga, & King-Kallimanis, 2007). A listwise deletion reduced the sample size to 427 participants who had complete records on all of the study variables.

In a preliminary assessment, no significant difference was found in major demographic characteristics of the sample by the residing cities. However, compared with the individuals whose data were collected by mail surveys, participants recruited by site visits were less likely to be married ($\chi^2 = 16.5, p < .001$) and were less educated ($\chi^2 = 9.97, p < .01$). The finding suggests that sole reliance on mail surveys might have excluded individuals with more vulnerable characteristics.

Measures

Outcome variable—Individuals were asked whether they were willing to use a nursing home in the future with a yes/no format.

Predisposing factors—Demographic variables included age (in years), gender (1 = *male*, 2 = *female*), and educational attainment (1 = < *high school*, 2 = \geq *high school*). The length of residence in the United States was also asked.

Potential health needs—Individuals were asked to report existing medical conditions using a nine-item list of chronic diseases and conditions commonly found among older populations (e.g., arthritis, stroke, heart problems, diabetes, cancer), using a yes/no response format. A summated score was used for the analysis.

Functional disability was assessed with a composite measure from the Physical and Instrumental Activities of Daily Living (Fillenbaum, 1988), Physical Performance Scale (Nagi, 1976) and Functional Health Scale (Rosow & Breslau, 1966). For the 20 items (e.g., eating, dressing, traveling, managing money, carrying a bag of groceries, and reaching out above head with arms), individuals were asked to report whether they were able to perform the activity. The possible range for functional status was 0 (*independence in all activities*) to 20 (*dependence in all activities*). Internal consistency was high in this sample ($\alpha=.91$).

Self-perceived health was assessed using a 5-point scale ranging from 1 (*excellent*) to 5 (*poor*).

Network-related enabling factors—Due to the high correlation between marital status and living arrangement ($r=.62, p<.001$), a composite variable (1 = *not married and living alone*, 0 = *others*) was created and used for analysis.

Family network was measured with Lubben's (1988) Social Network Scale. The three items include the number of relatives seen at least once a month (0 to 9 or more), frequency of contact (*less than monthly to daily*), and the number of relatives the participant felt close to (0 to 9 or more). Internal consistency was shown to be satisfactory ($\alpha = .74$).

A single question was asked whether participant had someone close living in a nursing home. Responses were coded as 1 (*yes*) or 0 (*no*).

Analytic Strategy

Descriptive information and bivariate correlations were assessed to understand the underlying characteristics of the sample and study variables. A logistic regression model of the willingness to use a nursing home was estimated by entering the constructs guided by Andersen's model: predisposing factors (age, gender, education, length of residence in the United States), potential health needs (chronic condition, functional disability, self-perceived health), and network-related enabling factors (marital status and living arrangement, family network, having someone close living in a nursing home).

Results

Descriptive Information

The sample of 427 Korean Americans ranged in age from 60 to 94 with an average age of 69.9 ($SD = 7.13$). More than half (58%) were female, and about 64% of the sample had received more than a high school education. The number of years lived in the United States ranged from 2 months to 51 years with a mean of 24.9 years ($SD = 10.8$). The average scores for chronic

condition and functional disability were 1.35 ($SD = 1.18$) and 1.53 ($SD = 3.25$), respectively. About 12% of the sample was not married and living alone. The scores for family network averaged 9.42 ($SD = 3.51$). Approximately 20% of the sample reported that they had someone close living in a nursing home, and 44.7% ($n = 191$) reported that they were willing to use a nursing home.

Predictors of the Intention to Use a Nursing Home

Table 1 summarizes the results of the multivariate logistic regression model of the willingness to use a nursing home. No significant effect was observed among predisposing variables. Poorer self-perceived health and having someone close living in a nursing home were identified as significant determinants of the willingness to use a nursing home. The overall fit of the model was small but significant ($-2 \log \text{likelihood} = 558.8$, pseudo R^2 s = .06 to .09, chi-square/ $df = 28.3/10$, $p < .01$).

Discussion

In response to the growth of minority older populations, this study explored predictors of the willingness to use a nursing home with 427 Korean American elders. The behavioral health model (Andersen, 1995; Andersen & Newman, 1973) was used as a theoretical guide. It is notable that a considerable portion of the sample (44.7%) reported that they were willing to use a nursing home. This number is far greater than that reported in a national survey of elders residing in Korea (19%) (Kim & Kim, 2004). In a study with older Japanese Americans (McCormick et al., 1996), 12% and 53% of the sample positively endorsed for the use of nursing home under the two hypothetical conditions of hip fracture and dementia, respectively. In Min's (2005) study with Korean American elders in California, the percentage of the individuals who showed their preference to use a paid helper at formal facilities was 16% in the hip fracture scenario and 51% in the stroke scenario. Because the question administered to this sample did not provide specific hypothetical conditions or options to choose from (e.g., nursing home vs. staying at home using informal support, home health care), no direct comparison is warranted. However, our findings certainly show that a considerable proportion of Korean American elders are open to nursing home use.

Among the array of predictive variables, significance was obtained for self-perceived health and having someone close living in a nursing home. Poorer ratings of physical health may lead an individual to think about future needs for long-term care, which in turn may lead to a greater current acceptance of nursing home use. It is notable that subjective perception of health had a greater effect than more objective health indicators such as the counts of chronic conditions and functional disability.

The likelihood of willingness to use a nursing home was significantly increased when participants had someone close living in a nursing home. Indirect experience and exposure to a nursing home environment may make older individuals be more favorable to the use of nursing home services. The finding is in line with other studies showing that prior knowledge and familiarity serves as an important enabler for service use (Jang, Kim, Hansen, & Chiriboga, 2007; Moon, Lubben, & Villa, 1998; Tijhuis, Peters, & Foets, 1990).

It is notable that there were no ethnically oriented nursing homes in the areas where the surveys were conducted. In a supplementary question in our survey, a majority (89.4%) of participants reported the need for ethnically oriented nursing homes for Korean elders in the area. Given this situation, it is expected that many barriers to service usage exist for Korean American elders regardless of their actual willingness to consider nursing home placement at some point in the future. The gap between willingness and actual usage of services deserves further investigation, in particular with immigrant elderly populations.

Some limitations to the study should be noted. Due to the use of a cross-sectional design and geographically defined nonrepresentative sample, causal inference and generalizability are not warranted. In this study, the outcome criterion, willingness to use a nursing home, was measured with a simple yes/no format. Other options for long-term care arrangement such as home- and community-based services (HCBS) need to be considered in the assessment. Although significant, the explanatory power of the overall model was low. Further exploration of contributing factors is invited. Attention also needs to be paid to the quality of care and residential satisfaction among ethnic minority residents in long-term care facilities. Despite the limitations, this study expanded our knowledge on long-term care needs of understudied and underserved ethnic minority elders. Findings may serve as a basis for culturally appropriate and accessible long-term care services for ever-growing minority older populations.

Acknowledgements

AUTHORS' NOTE: The project was supported by the National Institute on Aging Research Grant Program (1R03 AG 26332-01).

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Table 1
Regression Model of the Willingness to Use a Nursing Home

Predictor	B	SE	OR (95% CI)
Age	-.01	.01	.99 (0.96, 1.02)
Female	.13	.21	1.14 (0.75, 1.73)
≥ high school	.14	.23	1.15 (0.73, 1.81)
Length of stay in the United States	.00	.01	.99 (0.98, 1.01)
Chronic conditions	-.13	.10	.87 (0.71, 1.07)
Functional disability	.06	.04	1.05 (0.98, 1.14)
Self-perceived health	.38*	.14	1.46 (1.10, 1.92)
Not married and living alone	-.11	.32	.89 (0.47, 1.70)
Family network	-.02	.03	.98 (0.93, 1.04)
Have someone close living in a nursing home	1.03**	.27	2.80 (1.65, 4.75)
Summary statistics			
-2 log likelihood	558.8		
Cox & Snell R^2	.06		
Nagelkerker R^2	.09		
chi-square/ df	28.3/10*		

NOTE: CI = Confidence Interval; OR = Odds Ratio.

* $p < .01$.

** $p < .001$.