Published in final edited form as:

J Am Geriatr Soc. 2015 March ; 63(3): 565–570. doi:10.1111/jgs.13309.

Awareness and Completion of Advance Directives Among Korean American Older Adults

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Abstract

There has been growing concerns about racial and ethnic disparities in completion rates of advance directives (ADs) among community-dwelling older populations. While differences in AD completion rates in non-Hispanic Whites and African Americans have been reported, not much is known about the awareness and completion of ADs in other groups of ethnic minorities. Using a sample of community-dwelling Korean American older adults (n = 675) as a target, factors associated with their awareness and completion of ADs were explored. Guided by Andersen's behavioral health model, predisposing (age, sex, marital status, and education), need (chronic conditions and functional disability), and enabling variables (health insurance and acculturation) were included in the separate logistic regression models of AD awareness and AD completion. In both models, acculturation was found to be a significant predictor; those who had a higher level of acculturation were more likely to be aware of ADs and to have completed ADs. This study contributes to the knowledge about the role of acculturation in explaining AD awareness and completion among Korean American older adults and provides practice implications for possible AD educational interventions for this older adult minority population.

Keywords

Korean American older adults; advance directives; acculturation; Andersen's behavioral health model

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Conflict of Interest: The editor in chief has reviewed the conflict of interest checklist provided by the authors and has determined that the authors have no financial or any other kind of personal conflicts with this paper.

Author Contributions: Debra Dobbs: Conceptualization and design drafting the article for critical intellectual content, Nan Park: Conceptualization and design, data analysis and preparation of the manuscript, Yuri Jang: Acquisition of data, conceptualization and design, preparation of the manuscript, Hongdao Meng: Conceptualization and preparation of the manuscript.

Sponsor's Role: None.

Introduction

The Patient Self-Determination Act (PSDA) of 1990 established advance directives (ADs) as legal documents that protect patients' rights regarding decisions about their medical care, including accepting or refusing life-sustaining treatments. The PSDA has served as a significant piece of federal legislation that moves forward patient education about and utilization of ADs.[1] While the rate of AD completion for community-living older adults who have been admitted to hospitals or nursing homes has been reported to be as high as 70%, [2] The completion rates in the general community-dwelling older adult population are much lower (at about 36%). [3] It is well documented that residents in institutions (e.g., assisted living, nursing home) who have completed ADs were less likely to have aggressive treatments at the end of life such as a feeding tube or respirator and more likely to have palliative or hospice care, [2] and were much less likely to die in the hospital compared to those who did not have a form indicating their preferences (6.4% versus 34.2%). [4] In addition, the completion of ADs has been shown to be associated with lower levels of Medicare spending, lower likelihood of in-hospital death and higher use of hospice and preferences for end-of-life treatment met in nationally representative samples of older adults. [5, 6] Given this positive trends in health care utilization attributed to the active engagement in advance care planning, Medicare will now provide coverage for a one-time initial advance care planning consultation for which their primary care physician is reimbursed. [7, 8]

There has been a growing concern about the disproportionate completion rates of ADs in racial and ethnic minority older adults. [9-13] While there has been research citing lower AD completion rates in African Americans compared to non-Hispanic Whites and a lack of awareness in African American older adults who are chronically ill [12, 14, 15], less is known about Korean Americans, a rapidly growing minority population in the U.S. [16, 17] The American Community survey estimated there were over 1.5 million Koreans in 2008 and the elderly population has been the fastest growing segment among Korean Americans. This may be explained by The Immigration Reform Act of 1965, which places emphasis on family reunification among immigrants. As a result of this Act, many adult children have invited their parents to come live with them and eventually apply for permanent residency. [16] The majority of the current generation of Korean American older adults are foreign-born immigrants and show a wide range of individual differences in the level of acculturation, which is defined as the transition from one culture's way of life to another is. [18]

In studying end-of-life decision making in racial/ethnic minorities, it is important to address cultural beliefs and values within each group. [19]. In traditional Korean culture, strong filial piety, reliance on familial relations, and avoidance of the discussion of disease and death in advance may deter the communication about end-of-life decisions including ADs. [11, 20, 21] Coupled with lack of awareness and low completion rates of ADs among older Korean Americans, the unique cultural characteristics call for the need to assess end-of-life communication in the population. Yet only few studies examined issues related to ADs among Korean older adults using small samples. [11, 20, 21]

Andersen's behavioral health model has been widely used as a conceptual framework to explain differences in utilization of various types of health care,[17, 22] including end-of-life care.[23] The model postulates that utilization of health services is largely influenced by predisposing (e.g., age, sex, marital status, education), need (e.g., chronic conditions, functional disability) and enabling factors (e.g., health insurance, acculturation). Of particular interest in the current investigation is the role of acculturation. To date, how acculturation may influence the awareness about and completion of ADs among Korean American older adults is largely unknown. Current evidence [11, 24] suggests that the rates of completion are very low compared to all other community-living older adults from all other racial and ethnic groups. Lack of awareness about ADs, the level of acculturation and negative attitudes about outside intervention in healthcare decisions beyond the family have all been attributed as reasons for low completion rates of ADs.[11, 13] Previous research has not examined the factors associated with the lack of awareness about ADs among Korean American elders.

Given the significant role of acculturation in end-of-life care decision making [11, 17, 24], this study set out to examine the role of acculturation on awareness about ADs and completion of ADs among a sample of community-dwelling Korean American older adults. It was hypothesized that a higher level of acculturation would be associated with not only an increased awareness about ADs but also the completion of ADs, while controlling for predisposing, need and enabling factors.

Methods

Participants

The data for this study came from surveys conducted between March and August 2008 in West Central Florida. Individuals were eligible to participate in the survey if they were Korean adults aged 60 and older and if they were able to understand and complete the questionnaire in the Korean language. The survey questionnaires were developed through back-translation and pilot-testing with 20 older Korean adults who were representative of the anticipated sample. Diverse sampling methods were used to recruit the immigrant population such as using a telephone directory and contacting ethnic organizations. The common survey sites included Korean churches, other religious organizations, Korean senior centers, senior housing, and an elder association. To recruit individuals who were not affiliated with the aforementioned groups, requests were made for referrals from respondents and other individuals associated with the primary data collection sites.

A total of 675 participants were included in the final sample. In places where visits were made, surveys were self-administered but trained Korean-speaking interviewers were available for those needing assistance. A copy of the questionnaire and a self-addressed, stamped return envelope were mailed to all individuals with whom onsite contacts were not possible. Participants were paid \$20 as an honorarium. Detailed information on sampling procedures and validation of the strategy of using multiple methods for recruitment is reported else where.[17]

Measures

Dependent Variables—Awareness about ADs was measured with the question: “Have you heard about advance directives?” The response was in the binary format of yes (1) or no (0). The completion of an AD was measured with a single question: “An advance directive is a type of legal document that designates someone who can make medical decisions in the event that you are unable to do so. Do you have such a document?” The response was in the binary format of yes (1) or no (0).

Predisposing Factors

Demographic characteristics included age in years, gender (0 = male, 1 = female), marital status (0 = not married, 1 = married), and education (0 = less than high school, 1 = high school or beyond).

Health Needs

Chronic health conditions were measured with a checklist asking participants whether they had ever experienced or been diagnosed with the following nine specific conditions or diseases: arthritis, heart problems, high blood pressure, diabetes, liver disease, digestive problems, kidney disease, stroke, and cancer. A total count of the number of reported conditions was used in the analyses.

Functional disability was assessed with a composite measure adapted from the Older Americans Resources and Services questionnaire [25]. The 20 items covered a wide range of basic and instrumental activities of daily living, including eating, dressing, shopping, transportation, managing money, carrying a bag of groceries, and reaching the arms above the head. Participants were asked whether they could perform each activity without a help (0), with some help (1), and unable to do (2). The potential range of the summative score was 0 (no disability) to 40 (severe disability). Internal consistency in the current sample was 0.93.

Enabling Factors

The enabling factors of health insurance and level of acculturation were included in the models. Health insurance was measured with a response in the yes (1)/no (0) format to a question whether the participant had health insurance coverage. The level of acculturation was assessed using a 12-item list of acculturation including items representing English proficiency, language for media consumption, food preference, ethnicity of social ties, sense of belonging, and familiarity with the host culture [26]. Each response was coded from 0 to 3. The summative score had a possible range from 0 to 36, with a higher score indicating a greater level of acculturation to mainstream American culture. Cronbach's alpha for internal consistency for this sample was .91.

Data Analysis

The underlying characteristics of the sample and study variables were examined using descriptive statistics. After confirming the anticipated high correlation between the level of awareness and completion rate, each was treated as an independent outcome variable.

Logistic regression models were used to estimate the likelihood of having awareness about ADs and completing ADs. Based on Andersen's model, each block of independent variables was entered in sequential order: predisposing factors (age, gender, marital status, and education), health needs (chronic conditions and functional disability), and enabling factors (health insurance and acculturation). Statistical analyses were conducted using IBM SPSS version 22.0 (SPSS Inc., Chicago, IL).

Results

As shown in Table 1, the average age of the sample was 70 ($SD = 6.83$). Approximately 59% were women, and 77% were married. The majority (71%) had high school or more education. Participants appeared to maintain good health with lower average levels of chronic conditions ($M = 1.35$, $SD = 1.24$) and functional disability ($M = 1.81$, $SD = 4.46$). Approximately 82% of the sample had health insurance coverage, and their average acculturation score was 17.77 ($SD = 7.57$). About one-fifth of the sample had awareness about ADs and less than one-fifth (18.6%) had completed an AD. As anticipated, the two outcome variables were highly correlated (Spearman's $\rho = .53$, $p < .01$).

The results from logistic regression analyses for awareness about ADs are shown in Table 2. Among the predisposing factors, being female ($OR = 1.63$, $CI = 1.06$ – 2.51), married status ($OR = 2.25$, $CI = 1.21$ – 4.17), and higher levels of education ($OR = 4.45$, $CI = 2.40$ – 8.25) were associated with awareness about ADs. When the need variables were entered, those with more chronic conditions were more likely to have awareness about ADs ($OR = 1.27$, $CI = 1.07$ – 1.51). Of the enabling factors, having health insurance ($OR = 3.84$, $CI = 1.78$ – 8.33) was positively associated with having awareness about ADs. In the final model, higher levels of acculturation was independently associated with higher likelihood of being aware about ADs ($OR = 1.09$, $CI = 1.06$ – 1.13). Being female, married, more education, more chronic conditions, and having health insurance also remained statistically significant predictors.

Table 3 presents the results from logistic regression analyses on completion of ADs. Of the predisposing variables, those who had high school or more education were more likely to complete an AD ($OR = 2.88$, $CI = 1.64$ – 5.07). In the subsequent model with health needs, those with greater functional disability were less likely to complete an AD ($OR = 0.91$, $CI = 0.84$ – 0.99). In the model with enabling factors, having health insurance ($OR = 4.47$, $CI = 1.88$ – 10.59) contributed to higher likelihood of completing an AD. In the final model with all predictors, older age ($OR = 1.05$, $CI = 1.01$ – 1.09) and higher levels of acculturation ($OR = 1.12$, $CI = 1.09$ – 1.16) increased the likelihood of the completion of an AD.

Discussion

This study hypothesized that the higher the level of acculturation in a large sample of community-dwelling Korean American older adults, the more likely there will be awareness of ADs and completion of ADs, while controlling for predisposing, need and enabling factors. Both study hypotheses were supported. The study findings related to acculturation

are consistent with findings from prior research in this same sample related to other end-of-life care preferences such as hospice care.[17]

The findings related to the predisposing and need factors that predict awareness of ADs (e.g., females, those with more education, and married, more chronic conditions and health insurance) are more consistent with previous research of factors associated with completion of ADs.[27, 28] In addition to acculturation, advanced age was the only predictor that remained significant in the final model of the completion of ADs. The main reason for the difference in significant predictors between the two study outcomes is the percentage of respondents who were aware of ADs (first outcome) but did not go on to complete ADs (second outcome). Out of the 20.3% of those who had awareness, close to 60% completed ADs. The findings from the models of the two outcomes suggest that awareness alone is not enough to promote completion of ADs among Korean American older adults.

A possible explanation of why those who are older are more likely to complete ADs may have to do with the higher prevalence of chronic conditions and their increased utilization of the health care system where AD forms would be completed in collaboration with physicians and other medical providers. Asking patients the question “do you have a living will?” is becoming common practice among physicians. In many cases, if the answer is no, the admitting health care staff are willing to assist in completion of these documents.[29] Increased physician and patient communication about the presence of a living will is needed to improve the rates of completion. The presence of an electronic medical record system has been shown to be effective in increasing physician-patient communication and documentation of ADs in the Veterans Affairs (VA) nursing home setting. During physician visits the provider will be prompted by the electronic system to ask the questions regarding living wills and other advance directives.[30] Additional research has also examined the effectiveness of electronic medical records systems specific to VA Medical Centers to improve communication and documentation of end of life care treatment preferences with positive results.[31]

From a policy standpoint, steps have been taken recently by Medicare that potentially will translate into increased awareness and completion of ADs. As of 2012, Medicare reimburses physicians for a one-time initial advance care planning conversation with Medicare beneficiaries.[8] Future work should examine the impact of this policy as well as the use of electronic medical records systems advance care planning practices among Korean American older adults. Future interventions may also focus on physician-targeted interventions that are adapted for Korean-speaking physicians because language is a key component in cultural competency of health care providers [32]

The finding that those who are younger are less likely to complete ADs, suggests that future research should explore the reasons for this finding. A qualitative study that includes a diverse sample of Korean American older adults could explore the reasons why there is a lack of completion in ADs as well as how these older Korean immigrants learned about ADs. This same qualitative approach has been used in other community dwelling, minority populations that have low rates of completion of advance directives.[12] Combining the quantitative results from the current study in a sequential mixed methods study [33] would

enable a better understanding of how to increase engagement in advance care planning among Korean American older adults less likely to complete ADs.

Given the low levels of awareness about and completion of ADs in this community-dwelling sample of Korean American older adults, interventions to increase AD literacy for this population are needed. The education should include the benefits of ADs such as a Do Not Resuscitate order, the designation of a health care surrogate, living wills and the Physician's Order for Life Sustaining Treatment among others. Our findings suggest individuals with a low level of acculturation to be prioritized in intervention efforts to increase the awareness and completion of ADs. Cultural and linguistic appropriateness needs to be taken into consideration in efforts to develop and disseminate AD educational programs. Given the success of churches as a recruitment site for the current study, this would be a recommended venue for an advance care planning educational intervention for community dwelling Korean American older adults. Previous research in the African American community has shown success using faith-based advance care planning promotion models.[34]

The study has a few limitations. Because of the cross-sectional design of the study, it is difficult to draw causal inferences of the relationship of predictors to outcomes. Using a longitudinal design, future studies may address a critical question of how awareness affects actual completion of ADs. Also, simple descriptive questions regarding awareness and completion of ADs were limited addressing more complex issues. For example, it would be interesting to know how these older Korean immigrants learned about ADs and how they culturally perceive of having ADs completed. As noted earlier, such questions might be explored using qualitative methodology. Despite the limitations, the present study presents important findings regarding end-of-life care and could provide a basis for the design of educational interventions regarding ADs in ethnic minority populations.

Acknowledgments

This project was supported by the National Institute of Mental Health Research Grant (1R21MH081094, Principal Investigator–Yuri Jang, PhD) and the University of South Florida foundation funding (grant number 390003, Principal Investigator–Debra Dobbs, PhD).

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Table 1
Descriptive Characteristics of the Sample and Study Variables (N = 675)

Variable	<i>M ± SD (range) or %</i>
<u>Predisposing factors</u>	
Age	70.13 ± 6.83 (60–96)
Gender (female)	58.8
Marital status (married)	76.6
Education (High school)	70.5
<u>Need factors</u>	
Chronic conditions	1.35 ± 1.24 (0–9)
Functional disability	1.81 ± 4.46 (0–40)
<u>Enabling factors</u>	
Health insurance (insured)	81.4
Acculturation	15.77 ± 7.57 (0–35)
<u>Outcomes</u>	
Awareness of advance directives	20.3
Completion of an advance directive	18.6

*
 $p < .05$,

**
 $p < .01$,

 $p < .001$

Table 2

Logistic Regression of Awareness about Advance Directives

Variable	Odds Ratio (95% Confidence Interval)			
	Model 1	Model 2	Model 3	Model 4
Predisposing factors				
Age	1.03 (1.10–1.06)	1.04 (1.00–1.07)	1.02 (0.98–1.06)	1.02 (0.99–1.06)
Gender (female)	1.63 (1.06–2.51) *	1.70 (1.09–2.64) *	1.71 (1.09–2.67) *	1.70 (1.07–2.71) *
Marital status (married)	2.25 (1.21–4.17) *	2.16 (1.17–4.00) *	2.05 (1.10–3.83) *	2.27 (1.20–4.31) *
Education (High school)	4.45 (2.40–8.25) ***	4.34 (2.32–8.11) ***	4.04 (2.16–7.57) ***	2.55 (1.33–4.91) **
Health needs				
Chronic conditions		1.27 (1.07–1.51) **	1.28 (1.08–1.52) **	1.29 (1.08–1.53) **
Functional disability		0.92 (0.84–1.00)	0.93 (0.85–1.01)	0.97 (0.90–1.05)
Enabling factors				
Health insurance (insured)			3.84 (1.78–8.33) **	2.30 (1.03–5.13) *
Acculturation				1.09 (1.06–1.13) ***
Summary statistics				
–2 log likelihood	615.84	605.96	590.76	562.25
Chi-square	41.10 ***	50.97 ***	66.17 ***	94.69 ***

* $p < .05$,** $p < .01$,*** $p < .001$

Table 3

Logistic Regressions of Completion of Advance Directive

Variable	Odds Ratio (95% Confidence Interval)			
	Model 1	Model 2	Model 3	Model 4
Predisposing factors				
Age	1.04 (1.01–1.08)*	1.05 (1.02–1.09)**	1.04 (1.00–1.08)*	1.05 (1.01–1.09)**
Gender (female)	1.29 (0.83–2.00)	1.37 (0.88–2.15)	1.38 (0.88–2.18)	1.41 (0.87–2.28)
Marital status (married)	1.58 (0.88–2.83)	1.49 (0.84–2.67)	1.40 (0.78–2.52)	1.60 (0.86–2.96)
Education (High school)	2.88 (1.64–5.07)***	2.75 (1.56–4.84)***	2.49 (1.41–4.39)**	1.32 (0.72–2.43)
Health needs				
Chronic conditions		1.16 (0.98–1.38)	1.16 (0.98–1.38)	1.17 (0.98–1.40)
Functional disability		0.91 (0.84–0.99)*	0.92 (0.85–1.00)	0.98 (0.91–1.05)
Enabling factors				
Health insurance (insured)			4.47 (1.88–10.59)**	2.30 (0.94–5.63)
Acculturation				1.12 (1.09–1.16)***
Summary statistics				
–2 log likelihood	609.19	601.86	585.54	535.98
Chi-square	22.29***	29.62***	45.94***	95.50***

*
 $p < .05$,**
 $p < .01$,***
 $p < .001$