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Childless Elders in Assisted Living: Findings from the Maryland Assisted Living Study

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Abstract

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There are no conflicts of interest to report.

We compared data drawn from a random sample of 399 current assisted living (AL) residents and a subsample of 222 newly admitted residents for two groups: childless AL residents and AL residents with children. The percentage of childless AL residents (26%) in our study was slightly higher than US population estimates of childless persons age 65 and over (20%). In the overall sample, the two groups differed significantly by age, race and women's years of education. The childless group was slightly younger, had a higher percentage of African American residents, and had more years of education than the group with children. In the subsample, we looked at demographic, functional, financial and social characteristics and found that compared to residents with children, fewer childless residents had a dementia diagnosis, received visits from a relative while more paid less money per month for AL and reported having private insurance. As childlessness among older adults continues to increase, it will become increasingly important to understand how child status affects the need for and experience of long-term care.

Keywords

childless; elderly; assisted living; long term care

Along with spouses, adult children provide a variety of caregiving services for their parents and play an important role in an older adult's decision to move into a long-term care facility such as assisted living (Aykan, 2003; Ball, Perkins, Hollingsworth, Whittington, & King, 2009; Choi, 1994; Freedman, Aykan, Wolf, & Marcotte, 2004; Wenger, 2009). In addition, several studies have found that having a child, especially a daughter, greatly reduces the likelihood of institutionalization because of informal caregiving and financial support for formal caregiving services provided by children (Allen, Blieszner, & Roberto, 2000; Aykan, 2003; Brody, Litvin, Hoffman, & Kleban, 1995; Freedman, 1996; Pearlin, Pioli, & McLaughlin, 2001). Lacking child-kin supports, childless older adults are consequently disproportionately represented in long-term care (Aykan, 2003; Freedman, 1996).

Current estimates of childless older adults (65 and older) in the United States range from 15% (Koropecj-Cox & Call, 2007) to 20% (Bloom & Trussell, 1984; Girona, Lubben, & Atchison, 1999). Beyond the U.S., some have predicted that, given current trends, childlessness among people age 70 and over in developed countries may exceed 30% by 2030 (Dykstra & Hagestad, 2007), although this is an area of continued debate (Kohli & Albertini, 2009). When fertility alone is used as an indicator of childlessness, childless rates by sex for people age 65 and over range from 11% to 15% for men (Bachu, 1996; Koropecj-Cox & Call, 2007) and 17% to 20% for women (Abma & Martinez, 2006). Numerous studies report no significant difference between childless rates in White and African American women (Dye, 2004) age 65 and over in the U.S.. Fewer data are available for childless status by race for men. Single marital status is associated with childlessness in men and women; higher levels of education are related to childlessness in women only (Abma & Martinez, 2006; Bloom & Trussell, 1984; Livingston & Cohn, 2010; Ruggles, 1994). We note that despite higher levels of education in childless women, wages for women overall are lower than men's, which may cause one type of economic disadvantage for them. Other economic disadvantages for women include loss of pension due to loss of a spouse and greater overall life expectancy than men (Gibson, 1995). Women currently comprise the majority of long-term care users. Childless older women, because they lack financial support from children and potentially spouses, may be at a greater disadvantage than older women with children (Gibson, 1995).

Research focused on psychological wellbeing (Zhang & Hayward, 2001), utilization of social service systems (Choi, 1994), and overall health and mortality has also found important differences between older adults with and without children and between sexes,

factors which also may play a role in the decision to move into residential long-term care such as assisted living. For example, Zhang and Hayward (2001) investigated negative effects of childlessness on psychological wellbeing using data from the 1993 Asset and Health Dynamics Among the Oldest Old. They found that non-married, childless men had higher rates of depression and loneliness than either childless women (regardless of marital status) or older men and women with children. This finding is in line with findings from a series of studies that began in the 1970s (ref).

Presence of a child has been linked to better health outcomes in several studies and has been attributed to the concept of “social control,” which describes a particular behavior that is enacted due to perceived or actual constraints of a particular group (Tucker, 2002; Umberson, 1987). In short, people who have children tend to engage in less risky (e.g., alcohol, smoking) and more positive behaviors (e.g., visits to a physician, exercise) (Kendig, Dykstra, van Gaalen, & Melkas, 2007; Kohli & Albertini, 2009) than people who have never had children, presumably to set a positive example. In African American communities, “fictive kin” or non-family members who function as family have been shown to play an important, positive role in health and subjective wellbeing (Taylor, Chatters, Hardison, & Riley, 2001). It is unclear, however, whether involvement of fictive kin helps to modify potentially riskier health behaviors in childless adults.

There have been few studies to date on childless older adults and long-term care services they may receive or need. Using data from the Longitudinal Survey of Aging, Choi (1994) examined utilization of social service systems, including senior centers, adult day care, congregate meals, transportation, and others, among community dwelling childless elders and those with children. Although there were no significant differences in access the complete range of services by group, the childless older adults relied more on paid helpers than those with children. Wolf & Laditka (2006) analyzed utilization of Medicare services by childless beneficiaries, defined as beneficiaries with no living children, and found similar expenditures between those with and without children except in the category of physician services expenditures for providing long-term care services through office visits or within long-term care facilities. This finding likely reflects lack of kin support rather than differences in overall health and functional status between the two groups.

In the larger picture of long-term care in the United States, AL has been described as a type of long-term residential care that falls in between independent living in the community and nursing-home level care (Ball, et al., 2009; Mitchell & Kemp, 2000; [BLINDED]). Nationwide, residents of AL facilities are predominantly White and female, and most AL facilities are paid for through private funds (Morgan, Gruber-Baldini, & Magaziner, 2001). AL facilities are generally marketed as settings that maximize resident dignity, autonomy and independence and encourage family involvement (Carder & Hernandez, 2004; Coalition, 1998). In Maryland, AL is defined as follows:

Assisted living residences provide a home and support services to meet the needs of residents who are unable to perform, or who need help in performing, activities of daily living. Assisted living residences may provide assistance with meal preparation, household chores, managing medications, and dressing or bathing. People who live in assisted living residences generally have less complicated health and assistance needs than people in nursing homes (MHHC, 2012).

Assisted living facilities are licensed but can range widely in size and in the services provided.

Given the projected increases in childless older adults worldwide and the link between childlessness and risk of institutionalization, it has become increasingly important to

understand whether there are measurable differences in demographic, physical, functional, mental health, financial and social characteristics between long-term care residents who are childless compared to those who have children. Such knowledge will be crucial in planning future long-term care services, both in the community and also in residential care settings as well and as in the development and augmentation of housing policies for older adults.

The purpose of this study was to describe the demographic, functional, financial and social characteristics of childless older adults residing in assisted living facilities in Maryland compared to residents who have children. We hypothesized that due to the expense of AL and lack of a child to encourage a move to an AL facility from home, childless older adults who recently moved into AL (stay of six months or less) would have poorer physical and cognitive health and higher rates of depression than those with children. We also hypothesized that the childless residents would be more likely to have purchased long-term care and private insurance in anticipation of their need for formal support services and would be more likely to live in less expensive, non-profit AL facilities than residents with children (San Antonio & Rubinstein, 2004). Finally, we were interested in learning about the social characteristics of childless AL residents including visits from family and friends and activities (Burge & Street, 2010). We therefore hypothesized that childless residents would have lower rates of social interaction compared to the residents with children.

Methods

Data were drawn from Phases 1 and 2 of the [BLINDED] Study, which has been described in detail elsewhere ([BLINDED]). In Phase 1, 22 AL facilities (10 large, 12 small) in central Maryland were randomly sampled and 198 current AL residents enrolled. In Phase II, 26 AL facilities randomly selected participated and 203 recently-admitted residents were enrolled. 401 participants were in the total [BLINDED] sample (Phase 1 and 2); 2 were missing data on number of living children. To obtain a better understanding of demographics, health, cognition, financial and social characteristics upon entry into AL, we studied a sub-sample of newly-admitted residents: people who have only lived in the facility for six months or less at the interview/evaluation ([BLINDED]). Two hundred twenty two participants were in the sub-sample. The [BLINDED] study was approved by the [BLINDED] Institutional Review Board. Written consent/assent was obtained from all participants.

Measures

Demographic data—Resident volunteers completed detailed, in-person evaluations.

Additional data were obtained from knowledgeable staff informants and family members or close friends, when available. “Childless” residents were defined as those having no living children.

Physical health, cognition and depression—Physical health and function was assessed using the General Medical Health Rating scale (GMHR) and the Psychogeriatric Dependency Rating Scale (PGDRS) – physical subscale, a measure of activities of daily living (Wilkinson & Graham-White, 1980). Cognitive function was measured by scores on the Mini Mental State Exam (Folstein, Folstein, & McHugh, 1975); the PGDRS -- orientation subscale (Wilkinson & Graham-White, 1980); a nine-item list on ability to complete activities of daily living; and presence of dementia which was determined by neuropsychiatric examination (Rosenblatt et al., 2004). Depressive symptoms were assessed using the Cornell Scale for Depression in Dementia (Alexopoulos, Abrams, Young, & Shamoian, 1988).

Reason for admission, facility information and types of insurance—Reason for admission, resident's type of insurance, and monthly AL cost for newly admitted residents (<6 months) was obtained from resident chart and confirmed by an informant (e.g., resident, and family/friend.) Information about the facility (e.g., non-profit status) was obtained from staff.

Social characteristics—Newly admitted residents were asked to approximate the number of hours per month they spent participating in group and solo activities. They were also asked to estimate the number of hours they spent visiting with family members, friends, their power-of-attorney, and clergy (Rosenblatt et al., 2004).

Analyses

Descriptive statistics, independent samples t tests (two-tailed) and chi square tests were used to compare demographic data for the entire sample and demographic data, measures of physical and cognitive function and depressive symptoms; and financial and social data for childless residents and residents with children in a sub-sample of newly-admitted residents who stay had been six months or less at the interview/evaluation. We also conducted subsample analyses of group differences by sex.

Results

Entire Study Sample

Demographic Data—Data on number of living children was available for 399 AL residents enrolled in the study. Of these, 26% (n=105) reported no children; 74% (n=294) had 1 or more living children. Table 1 includes descriptive demographic data by group.

Although there were no significant differences by group for sex, there were significant differences by group for race: 22% of the childless residents were African American compared to only 8% for the residents with children ($p=0.02$). The groups also significantly differed by age, with the childless residents being slightly younger ($p=0.02$). For marital status: 47.1% of the childless residents were widowed compared to 76% of the residents with children; and 47.1% of the childless residents were “never married” compared to less than 1% of the residents with children.

Overall, the two groups did not differ significantly by years of education. However, when analyzing women only, childless women had significantly more education than women without children, 14.4 (3.3) versus 13.4 (2.7), $t(189)=2.21$, $p=0.03$. There was no significant difference between groups in total length of stay.

Newly Admitted AL Residents

Demographic Data—222 subjects comprised our sub-sample of residents in AL who had resided there for six months or less. Table 2 contains demographic data. There was no significant difference in age by group, with the childless group being slightly younger than the residents with children. There was no difference by sex, race, or years of education for the two groups as a whole. As with the entire study sample, there was a significant difference in groups for women's years of education: childless women in the sample had more years of education than women with children. We also found a significant difference in marital status, with equal percentages in the childless group of residents who were widowed (43.9%) or never married (43.9%). In the group of residents with children, the majority, 69.5%, were widowed; less than one percent (0.6%) were never married.

Physical and Cognitive Health and Depressive Symptoms—We found no significant differences between groups in any of the measures of physical health, cognition or depression. We did find significantly fewer childless residents (56 or 53.3%) who had a diagnosis of dementia ($X^2(1)=4.34$, $p=0.04$), than residents with children (190 or 64.5%).

Reason for admission, facility information and types of insurance—Table 3 includes data on reason for admission, facility size and cost, and insurance type by group. There was no difference across groups for all admission reasons (caregiver, medical, behavioral, financial, functional, or other). There was also no difference in facility size (small or large) by group. We hypothesized that the childless residents would be more likely to stay in less expensive non-profit AL facilities than those with children. There was a significant difference in monthly cost ($t(193)=-2.70$, $p=0.01$), with the mean expense for the childless group being around \$700 less per month than the group with children. There was no difference in non-profit status of facilities by group. We found no significant difference by group regarding purchase of long-term care insurance. We did find a significant difference in types of insurance held by the resident ($X^2(3)=15.00$, $p=.002$): 44 (83%) in the childless group had Medicare only compared to 155 (97.5%) in the group with children and 6 (11.3%) childless residents with private insurance compared to 2 (1.3%) with children.

Social Characteristics—Table 4 includes data on social characteristics by group including monthly hours of participation by activity type and whether the resident received visits in the past month by various individuals. There was no significant difference by group for hours spent in group activities, solitary activities, television viewing and time in bed. There was a significant difference, however, in time spent with visitors, with the childless group spending fewer hours per month visiting with someone compared than those with children. Regarding number of visits by type of acquaintance, there were significant differences in number of visits received from a relative and from the power of attorney, with the childless group receiving fewer of both. The childless group did, however, receive more monthly visits from clergy than the group with children.

Discussion

Although the number of childless elders is expected to grow in the upcoming years, little attention has been paid to their impact on long-term care in general and assisted living specifically. Our study provided an important first step toward looking at childless elders in AL. In both the main sample (all AL residents enrolled in the MD-AL Study) and the sub-group (AL residents with a stay of 6 months or less), around 26% of residents enrolled reported having no living children, which is higher than the estimated range of 15 to 20% that has been reported in the general population of people age 65 and over in the U.S. (Bloom & Trussell, 1984; Gironde, Lubben, & Atchinson, 1999; Koropecj-Cox & Call, 2007). Although it is unclear whether the residents in our study had never had children or lost a son or daughter at some point in their lives, none had the current emotional or financial support of a child at this stage in their lives. Given that more than a quarter of the residents we sampled were childless, projections that childlessness in general is on the rise in the U.S. and the world, and the potential increase in the need for long-term care services due to increases in life expectancy at birth, it is important that we understand the demographic characteristics as well as care, financial and social needs of this growing group.

One of the interesting findings from our study was the higher-than-expected percentage of childless African American assisted living residents (21.1%) compared to African American residents with children (12.2%). The high proportion of African American childless AL residents was surprising for several reasons. While it has been well established that the overwhelming majority of AL residents in the U.S. are White (Burge & Street, 2010), the

small number of African Americans living in AL facilities has often been attributed to the care provided by fictive kin networks in the community (Ruggles, 1994; Taylor, et al., 2001). The role that fictive kin plays in the decision to move to a LTC facility in childless African Americans has not been well reported. The nearly double percentage of childless African American elders compared to those with children suggests that there may be limits to caregiving provided by fictive kin networks that have not been thoroughly described yet. For example, although informal fictive kin networks may play an important role for African American elders in relatively good health, physical and/or cognitive decline may pose more caregiving demands than are possible or practical for fictive kin to provide, necessitating formal long-term care services. Similarly, African American elders may decide that their own personal needs may require a move from the community to AL and that relying on fictive kin is not practical or possible. Although this is an important area of consideration, we do not have sufficient data in the current study to understand why this difference exists. Further research specifically on African American childless elders in long-term care is therefore needed.

Another interesting demographic finding was the differences in years of education for childless women compared to women with children. It is well known that most long-term care assisted living residents are women. Our findings support this. Our study also supports others' findings that higher educational attainment is associated with higher rates of childlessness in women but not men (Abma & Martinez, 2006; Bloom & Trussell, 1984; Livingston & Coh, 2010). Higher levels of education in childless older women are likely grounded in employment practices in the U.S. whereby pregnant women could be legally terminated from their jobs until 1978, when protective legislation was passed (Kelly & Dobbin, 1999). Since education was a potential gateway to employment for women in the past and children a possible detriment, many career-oriented women prior to 1978 likely had to choose between work or family. We could therefore expect that as sex discrimination in the work place ideally decreases over the year, the difference in years of education for women with children would be similar to childless women in the future.

Regarding marital status, most (nearly 95%) of the childless residents were either widowed or never married, compared to 77% of the residents who were widowed and less than 1% who were never married. As reported in the literature, single status is associated with childlessness for men and women so this finding was expected. When we examined the cost of AL facilities, we found that more childless elders lived in less expensive facilities (around \$700 per month) than those with children. This may be due to the tie between being married (or even widowed in some cases) and better financial status in older age compared to those who have never been married.

In addition to demographics, we examined physical and cognitive function and depressive symptoms in the two resident groups. As we reported, the only significant difference in our measures for the newly admitted resident subsample was in the presence of dementia. Fewer newly admitted childless AL residents (53.3%) had dementia compared to those with children (64.5%). We had hypothesized that because of the expense of AL and without having the encouragement or support of a child to move into AL, that childless elders would delay movement until their physical and cognitive health was poorer than elders with children. Our findings did not support this. Measures of physical health and reports of having a medical reason for being admitted were similar for the two groups. (See Table 3). However, more residents with children (61.8%) cited having a "functional" reason for moving into AL compared to 54.4% of residents without children, which is similar to the percentages of those with dementia.

Although the difference in presence of dementia is significant, it is important to note that more than half of newly admitted childless residents had a diagnosis of dementia. It would be important to know more about the circumstances under which the childless residents were living prior to coming to AL, such as who provided care and assistance (e.g., friends, family, neighbors, others), what triggered the decision to move into AL (e.g., an incident, the resident him or herself, an agency), and who ultimately made the decision to move into AL. Such knowledge could help with education targeted toward appropriate individuals such as outreach programs for the general community about services available to older residents and education about dementia for families and neighbors.

Once again, regarding financial differences, we found, as expected, that the childless group paid less on average per month for their AL facility and more had more private insurance than residents with children. Without the potential financial support of spouses or children, finding ways to finance AL care may be a unique challenge to the childless group. As we mentioned earlier, most of the childless AL residents are women and are divorced, widowed or have never been married. Consequently they are prone to lower savings due to disparity in pay and opportunities for women during their working years. Consideration of the sex differences is a key to future planning for this group.

Finally, regarding social engagement, childless AL residents spent less time per month visiting with others than people with children, and significantly fewer reported visiting in the past month with a relative. Creating more opportunities to encourage friendships among residents and/or community members and other forms of socialization would likely improve socialization for childless residents.

There are several limitations to the study. All of the facilities were located in Central Maryland. Therefore, results may not be generalizable to AL facilities in other states. Also, it is not clear whether residents, defined here as “childless”, in fact had children who predeceased them or whether this distinction is meaningful in terms of assessed outcomes. Finally, data regarding resident views of their current situation (e.g., residing in AL, perception of his/her social network and activities) were only available for Phase 2 participants and therefore were not included in the study.

Overall, our findings point to the need to better understand what differences may exist between AL residents and those with children. Future studies that include purposeful samples of childless elders, or studies in which childless elders are oversampled, can yield important information about the financial, care and social needs of childless people in AL and other long-term care facilities and services. For example, activities designed to encourage family participation may not be applicable for childless elders, especially those who have never married. Even the experience of grieving for a spouse may differ in groups of people with children, who may provide a particular type of emotional support, and those who do not. Finally, the unique needs and challenges of childless older women and their experiences is an important area for future research.

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Table 1

Demographic data by group for the entire study sample.

	Childless (n=105)	With Children (n=294)	
Sex (count, % for group)	21 men (21.2%) 78 women (78.8%)	84 men (28.0%) 216 women (72%)	$\chi^2(1, N=399)=1.77, p=0.18$
Race* (count, % for group)	81 White (77.9%) 23 African Amer. (22%)	257 White (87.8%) 36 African Amer. (12.2%)	$\chi^2(1, N=397)=5.86, p=0.02$
Age	M=85.5 (11.11)	M=85.90 (7.82)	$t(397)=-2.37, p=0.02$
Mean (SD) Years of Education	M=14.2 (3.4)	M=13.8 (3.1)	$t(259)=0.75, p=0.46$
Mean (SD) Years of Education, Men only	M=13.42 (4.16)	M=15.07 (3.73)	$t(68)=-1.38, p=0.85$
Mean (SD) Years of Education, Women only	M=14.4 (3.3)	M=13.37 (2.7)	$t(189)=2.21, p=0.03$
Marital Status (count, % for group)			$\chi^2(6, N=399)=148.1, p<0.00$
Married/Cohabitating	2 (1.9%)	19 (6.5%)	
Married/Living Apart	0 (0.0%)	19 (6.5%)	
Divorced	7 (6.7%)	28 (9.5%)	
Widowed	49 (47.1%)	226 (76.9%)	
Never Married	46 (47.1%)	1 (0.3%)	
Other	0 (0.0%)	1 (0.3%)	
Mean (SD) AL Stay in Months	M=15.9 (23.2)	M=13.4 (17.4)	$t(396)=1.18, p=0.24$

* Data not available for all participants.

Table 2

Demographic data by group for recently admitted residents (length of stay < 6 months).

	Childless (n=57)	With Children (n=165)	
Sex (count, % for group)	11 men (19.2%) 46 women (80.7%)	50 men (30.0%) 115 women (70.0%)	$\chi^2(1)=2.58, p=0.11$
Race (count, % for group)	44 White (77.2%) 13 African Amer. (22.8%)	144 White (87.2%) 21 African Amer. (12.7%)	$\chi^2(1)=3.32, p=0.07$
Age	82.4 (12.03)	85.1 (7.97)	$t(220)=-1.96, p=0.05$
Mean (SD) Years of Education (all)	14.3 (3.73)	13.7 (3.16)	$t(191)=0.97, p=0.33$
Mean (SD) Years of Education Men only	13.2 (4.66)	14.6 (3.86)	$t(52)=-0.93, p=0.34$
Mean (SD) Years of Education Women only	14.5 (3.51)	13.4 (2.73)	$t(137)=2.06, p=0.04$
Marital Status (count, % for group)			$\chi^2(6)=85.51, p<0.00$
Cohabiting	2 (3.5%)	17 (10.3%)	
Apart	0	11 (6.7%)	
Divorced	4 (7.0%)	20 (12.1%)	
Widowed	25 (43.9%)	115 (69.7%)	
Never Married	25 (43.9%)	1 (0.6%)	
Other	0	1 (0.6%)	

Table 3

Reason for admission, facility information, and types of insurance by group for recently admitted residents (stay < 6 months).

	Childless	With Children	
Admit Reason (count, % for group)			$\chi^2(6)=6.5, p=0.37$
Caregiver	1 (1.8%)	3 (1.8%)	
Medical	16 (28.1%)	41 (24.8%)	
Behavioral	2 (3.5%)	3 (1.8%)	
Financial	5 (8.8%)	4 (2.4%)	
Functional	31 (54.4%)	102 (61.8%)	
Other	2 (3.5%)	5 (3.0%)	
Facility size (count, % group)			$\chi^2(1)=1.33, p=0.25$
Small (<16 beds)	14 (24.6%)	29 (17.6)	
Large (≥ 16 beds)	43 (75.4%)	136 (82.4%)	
Mean cost in dollars per month (SD)	2563 (1533)	3203 (1417)	$t(193)=-2.70, p=0.01$
For profit? (%yes)	25 (43.9%)	82 (49.7%)	$\chi^2(1)=0.58, p=0.45$
Insurance type (count, % group) Medicare			$\chi^2(3)=15.00, p=0.002$
Medical Assistance	44 (83%)	155 (97.5%)	
Private Care	2 (2.8%)	1 (0.6%)	
HMO	6 (11.3%)	2 (1.3%)	
	1 (1.9%)	1 (0.6%)	
LTC insurance? (%yes)	7 (12%)	12 (21%)	$\chi^2(1)=1.12, p=0.29$

Table 4

Social activities by group for recently admitted residents (stay < 6 months).

	Childless	With Children	
Mean (SD) Activities by Hours Per Month			
Group activities (e.g., bingo)	28.62 (42.2)	30.12 (40.0)	t(391)=-0.32, p=0.75
Solitary act (e.g., jigsaw puzzle)	48.36 (64.7)	44.16 (51.7)	t(389)=0.66, p=0.51
Television	62.96 (73.6)	65.21 (63.3)	t(388)=-0.30, p=0.77
Time in Bed	288.45 (81.2)	281.91 (70.0)	t(387)=-0.78, p=0.44
Spent with visitors	11.19 (17.3)	19.7 (29.4)	t(393)=-2.79, p=0.003
Number (%group) visited in the past month by:			
Relatives	67 (64.4%)	278 (95.2%)	X ² (1)=64.73, p=0.00
Friend	57 (54.8%)	131 (45.2%)	X ² (1)=2.85, p=0.09
Clergy	22 (21.2%)	42 (14.5%)	X ² (1)=2.50, p=0.11
Power of Attorney	21 (20.8%)	74 (25.8%)	X ² (1)=1.00, p=0.32 b