

Racial Disparities in Receipt of Hospice Services Among Nursing Home Residents

Background

While previous research has detailed the differences between blacks and non-Hispanic whites regarding preferences for treatment, advance care planning decisions, and utilization of hospice services, there is little information regarding the differences across all racial groups. This is particularly significant for nursing home residents who could potentially benefit from these services, but are less likely to access them. Although hospice and end-of life services are linked to better resident satisfaction, symptom management, caregiver outcomes, and overall cost savings, many people fail to enroll in hospice or do not document their preferences through advance directives and therefore miss out on these beneficial services.

The Study

The purpose of this study was to identify differences in hospice use, care planning, and end-of-life treatment among nursing home residents across races, as these factors significantly affect residents' quality of life.

Study Methods

Residents' age (65 years or older), documented use of hospice services, and long-stay status were considered when selecting assessment records from the National 2007 Minimum Data Set (MDS). With "race" as the main predictor, descriptive statistics and linear regression were used for dependent variables, controlling for the other independent variables of age, sex, disease diagnosis, and end-stage disease.

Findings

The analysis included 88,416 long-stay nursing home residents who received hospice during 2007. Approximately three-quarters (76.6%) were female, with an average participant age of 85.5 years. Among this group, 87.8% were White, 8.4% Black, 3.1% Hispanic, and 0.7% Asian. For those receiving hospice, 47.1% were identified as being in end-stage disease.

Table 1. Descriptive Statistics of Nursing Home Residents Receiving Hospice

Advance Care Planning and Hospice and Hospitalization Use	Percentage
Durable power of attorney for healthcare	18.4
Living will	9.2
Do not resuscitate order	39.1
Do not hospitalize order	5.3
One hospitalization within last 90 days	13.3
Died during study period	41.3

Abbreviation: MDS, Minimum Data Set.

^a Assessment of 2007 MDS national data.

Although they were receiving hospice services, slightly less than 40% of residents had a Do Not Resuscitate order (DNR; see Table 1). Additionally, less than a quarter (18.4%) of residents had a health care power of attorney, and even fewer had a living will or Do Not Hospitalize order (DNH; 9.2% and 5.3% respectively). Black, Hispanic, and Asian residents on hospice were all significantly less likely than White residents to have a power of attorney for health care, living will, or DNR order. When compared to White residents, the odds for Black, Hispanic, and Asian residents were .165,

.228, and .456 lower respectively ($p < .0001$) for documentation of a living will and .230, .271, and .436 lower, respectively ($P < .0001$) for having a power of attorney for health care. Compared to white residents, Asian residents were also the minority group most likely to have a DNR order, while Hispanic residents were the least likely; however, the odds for all three minority groups were significantly lower compared with White residents, .571, .404, and .689, respectively ($p < .001$).

In contrast to other Advance Care Planning measures, Asian residents were significantly more likely than all other groups to have a DNH order in their file. For DNH orders, the odds were 1.985 more for Asian residents than for White residents; however, the odds of having a DNH order for Black and Hispanic residents were significantly less, .693 and .788 respectively (see Table 2).

Table 2. Odds Ratio Estimates of Advance Care Planning by Race

Advance Care Planning Measures	Value	Point Estimate	95% Wald Confidence Limits	P
Power of attorney/health care				
Black	0.230	0.209	0.252	<.0001
Hispanic	0.271	0.233	0.315	<.0001
Asian	0.436	0.337	0.566	<.0001
Living will				
Black	0.165	0.141	0.194	<.0001
Hispanic	0.228	0.181	0.289	<.0001
Asian	0.456	0.321	0.646	<.0001
Do not resuscitate				
Black	0.571	0.535	0.610	.0008
Hispanic	0.404	0.362	0.451	<.0001
Asian	0.689	0.555	0.856	<.0001
Do not hospitalize				
Black	0.693	0.615	0.781	<.0001
Hispanic	0.788	0.652	0.951	.0131
Asian	1.985	1.521	2.591	<.0001

Abbreviation: MDS, Minimum Data Set.

^a Assessment of 2007 MDS national data; comparison group—white nursing home residents.

Black, Hispanic and Asian residents were all more likely to be hospitalized while receiving hospice

compared with White residents. Black, Hispanic, and Asian residents also have an increased number of hospitalizations (estimates of .301, .334, and .492 respectively [$p = .0001$]). Additionally, all racial minority groups were less likely to die while receiving hospice (odds ratios of .834, .727, and .848 respectively) indicating racial disparities in hospice use among nursing home residents at the end of life (see Table 3).

Discussion and Policy Recommendations

The findings of this study point to racial disparities among long-stay nursing home residents regarding hospice use, advance care, and end-of-life planning. When considering the important role of hospice services and advance care planning in the overall care and outcomes for residents, the disparities need to be addressed in order to improve conditions for both residents and their families. Hospice services not only improve care quality and satisfaction, but help to reduce health care expenditures, which addresses the pressure that healthcare systems face to cut costs while maintaining effective outcomes.

For nursing home residents identified as near the end of life, study results show overall use of hospice is quite low, at less than 50%. The use of hospice and completion of advance care measures potentially impact resident and family end-of-life experiences. The findings also support prior research documenting differences in advance care planning and end-of-life preferences between White older adults and other racial groups; reasons for these differences are unknown.

Compared with White nursing home residents on hospice, all other racial groups have significantly lower documentation rates of advance directives overall and were more likely to be hospitalized, which raises concerns about unnecessary, expensive, and perhaps unwanted care. As racial diversity within nursing homes continues to grow, it is important to consider strategies for improving quality of life and increasing the usage of end-of-

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life care. Nursing homes will be further tasked with incorporating culturally sensitive services that acknowledge resident differences, including hospice and palliative care, advance directives, and documentation of preferred services. Each of these aspects of end-of-life planning have important implications for resident end-of-life quality. By tailoring programs for specific racial groups, nursing homes may be able to better meet the different needs and desires of a diverse resident population.

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Table 3. Estimates for Death and Hospitalization by Race.

Death	Point Estimate		95% Wald Confidence Limits	P Value
Black	0.834	0.793	0.878	<.0001
Hispanic	0.727	0.668	0.790	<.0001
Asian	0.848	0.712	1.009	.0632
Hospitalization Parameter	Estimate		Error	P Value
Black	exp(0.301)		0.042	<.0001
Hispanic	exp(0.334)		0.069	<.0001
Asian	exp(0.492)		0.127	.0001

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*Assessment of 2007 MDS national data; comparison group—white nursing home residents.