National Newspaper Portrayal of Nursing Homes: Tone of Coverage and Its Correlates

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Abstract

Objectives—The mass media can exert considerable influence over the relative saliency of different public policy concerns. Because emotional resonance can have a strong impact on how the general public and policymakers perceive specific issues, the purpose of this study is to characterize the tone of nursing home coverage in the national media.

Methods—Keyword searches of LexisNexis were used to identify 1,562 articles published in four national newspapers from 1999–2008. The content of each article was analyzed and tone, themes, prominence, focal entity, and geographic focus assessed. Multinomial logit was used to examine the correlates of tone.

Results—Most articles were negative (49.2%) or neutral (40.3%); few were positive (10.5%). Both positive and negative articles were considerably more likely than neutral articles (>10 times) to be an opinion piece. Negative articles were three-quarters more likely to be on the front page and two-thirds more likely to focus on industry actors. Positive articles were ten times more likely to be about community actors and two and three-quarters more likely to be about local issues. Positive articles were considerably more likely to be about quality; negative articles about negligence/fraud and natural disasters.

Conclusions—Findings suggest that negative reporting predominates and its impact on public perceptions and government decision making may be reinforced by its prominence and focus on

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industry interests/behavior. The adverse impact of media coverage on the industry's reputation has likely influenced consumer care choices, particularly in light of growing competition from the home- and community-based and assisted living sectors.

Keywords

nursing homes; long-term care; newspapers; media; tone

Introduction

The general public, government officials, and policy specialists, hold highly unfavorable views of nursing homes (NHs).[1–5] Likely sources for these opinions include personal experience and policy research. Another is the way in which NHs have been portrayed in the national media, as 80% of Americans report hearing or reading about NHs during the year.[2] It is believed that the media depicts NHs in a negative light and that such portrayals influence public opinion and government policy, including the formation of low consumer expectations and the adoption of more stringent regulatory oversight.[6–8] Despite the potential impact of media portrayals, few studies have systematically examined the way in which NH-related issues have been depicted;[9,10] none with respect to tone—positive, negative, or neutral.

Policy and communication theory reserves a prominent role for the mass media in the agenda setting process.[11–13] The media's influence extends to people's ranking of the relative importance or salience of general topics (e.g., NHs). It also extends to how particular topics are framed. In this respect the emotional resonance of a story has been deemed important because it can have a strong impact on the views of the general public and policymakers which, in turn, can influence government policy and consumer behavior.[11,14] The purpose of this study is to characterize the tone of NH coverage and its relationship to other dimensions of the coverage reported in four widely-read national newspapers—*The New York Times, The Washington Post, Chicago Tribune*, and *The Los Angeles Times.*

Methods

Data

All NH articles published in the four study newspapers from 1/1/99–12/31/08 were retrieved from LexisNexis. Search terms included: "nursing home(s)," long-term care facility/ facilities," and "nursing facility/facilities." Each article was screened for potential relevance. Exclusions consisted of duplicates, obituaries, advertisements, and articles without substantive NH content. Of approximately 5,000 articles identified, 1,704 met our inclusion criteria. From this total, 142 articles were excluded because they had mixed positive-negative tone, resulting in a final dataset of 1,562 articles.

Coding Strategy

A coding instrument was developed to systematically abstract information from the articles identified. An initial set of coding categories was refined through an inductive process whereby two investigators independently generated categories over several iterations.[15,16] This process culminated in the final coding instrument. Four research assistants (RAs) were trained on the coding instrument using a different sample of NH-related articles than those analyzed for the present study. This involved achieving consistency in coding amongst the RAs and the investigators. In instances where there was disagreement, articles were discussed until consensus was achieved. Inter-coder reliability tests were conducted five times. Each test involved a sample of 50 articles. With experience the overall level of

agreement reached 85% (range=75% to 100% across individual categories). Once coding of the four newspapers commenced, bi-weekly meetings were conducted to discuss progress and to resolve difficulties coding specific articles.

Content Abstracted

Affect: Articles with a positive tone portrayed NH providers, residents, or government policy in a favorable light. These articles typically included strongly favorable adjectives and anecdotes. Examples include: "The New NH, Emphasis on Home" and "Singing Just for Seniors; A Volunteer Troupe in L.A. Takes Its Talents to NHs." Articles with a negative tone emphasized less desirable aspects of the NH sector. These articles typically included unfavorable adjectives and anecdotes. Examples include: "At NH, Katrina Dealt Only with First Blow; Nuns Labored for Days in Fatal Heat to Get Help for Patients" and "13 NHs Accused of Abuse, Fraud in Suit." Articles with a neutral tone were factual pieces that eschewed strong wording, personal statements, or anecdotes. Examples include: "Elder Care Company Sold for $1.9 billion" and "Planning for NH Care."

Prominence: Information on prominence includes: type of article (editorial/column/letter, news); location (front page, front section, elsewhere); number of keywords—"nursing home," "nursing facility," etc.; number of words; and number of NH-related articles reported that day. Because the number of words were far from normally distributed—that is, highly skewed, the natural log of words, which corrects for skewness, was used.

Themes: Themes included: the quality of care and efforts to address/improve it (quality); payment sources (financing); legal proceedings concerning maltreatment, fraud, misconduct, abuse, etc. (negligence/fraud); the cost of NH care (cost); the downsizing, expansion, repair, maintenance, purchase, or opening of a facility (business/property); diverting/transitioning NH residents to non-institutional settings (rebalancing); the impact of and response to natural disasters (natural disasters); and processes preventing/enhancing access to NH care (access). Themes were not mutually exclusive. Consequently, articles could be coded under more than one theme.

Other Attributes: Other attributes include: focal entity (government, industry, residents/families, community); and geographic focus (national, state, local).

Data Analysis—First, we examined characteristics of the study sample. Second, we applied chi square tests and one-way analysis of variance (ANOVA) to examine bivariate relationships with tone. Third, we used multinomial logistic regression to examine the relationship between tone and other article characteristics, controlling for newspaper and year.

Results

Most articles were negative or neutral; comparatively few were positive (Table 1). Relatively few articles were opinion pieces or located on the front page. The three most common themes were quality, financing, and negligence/fraud. The focal entity was typically the government or NH industry. Geographic focus was distributed evenly across national, state, and local issues. Most articles derived from *The Los Angeles Times* and *The New York Times*. A high proportion was published in 1999, 2000, and 2005.

Bivariate analyses reveal significant differences in article characteristics across tone (Table 2). Neutral articles were less likely to be an opinion piece and published at the front of a section or newspaper than positive/ negative articles. They also had substantially fewer

words and keywords, on average. Positive articles were more likely to report about quality than negative/neutral articles. Whereas neutral articles were more likely to be about financing and business/property, negative articles were more likely to be about negligence/ fraud and natural disasters. Negative articles were more likely to focus on the NH industry; positive articles on the broader community and residents/families. Positive articles were more likely to focus on local issues but less likely on state issues than other articles.

Table 3 reports the multinomial logistic regression. Compared to neutral articles, positive articles were much more likely to be an opinion piece (Odds Ratio [OR]=14.07; p<.001); negative articles were much more likely to be an opinion piece (OR=11.64; p<.001) as well. Negative articles were more likely to be on the front page (OR=1.73, p<.05) than were neutral articles. Each additional word (OR=1.08; p<.001) and keyword (OR=1.07; p<.01) increased the likelihood of positive coverage; each additional word (OR=1.487, p<.001) and keyword (OR=2.216, p<.001) increased the likelihood of negative coverage also.

Compared to neutral articles, positive articles were nineteen times more likely to be about quality (OR=19.30; p<.01); negative articles six to eight times more likely to be about natural disasters (OR=5.87; p<.001) and negligence/fraud (OR=7.96; p<.001) and less likely to be about business/property issues (OR=.21; p<.01). Negative articles were more likely to be about the NH industry (OR=1.69, p<.01) than neutral articles; positive articles were ten times more likely to be about community actors (OR=10.25, p<.001) and two times more likely to be about residents/families (OR=1.98, p<.05). Positive articles were also nearly three times more likely to be about local issues (OR=2.78, p<.001) than were neutral articles.

Discussion

This is the first study to systematically analyze the tone of media coverage of the NH sector. Results support anecdotal claims[6–8] that coverage of NHs is rarely positive, most often negative and otherwise neutral. They are also consistent with the negative attitudes most Americans hold with respect to NHs.[1–4] It is likely that the predominately negative tone of media coverage has helped reinforce already unfavorable public perceptions in this area.

The media portrayed negligence/fraud especially negatively. The rate of litigation against NHs increased markedly beginning in the mid- to late-1990s.[17,18] So too has the amount of reporting on the subject, with the number of negligence/fraud-related articles increasing from approximately one-fifth to two-thirds of stories between 1999–2000 and 2003–2007. The concomitant increase in reporting with the rise in litigation reinforces previous findings, suggesting editors find criminal-related activity in institutional long-term care settings especially newsworthy.[7,10,19]

Negative coverage associated with events surrounding the Gulf Coast hurricanes may have reinforced Americans negative views as well. The proportion of NH articles pertaining to natural disasters rose dramatically in 2005 to nearly one-quarter of stories (23.1%) after which it declined to 1.0% by 2008. Unlike other hurricane-related articles,[20] coverage pertaining to NHs was overwhelmingly negative due to several high profile incidents where large numbers of residents died. Preparation for the safe evacuation/sheltering of residents became a significant area of concern in the aftermath of these disasters.[21,22]

Evidence suggests that coverage of long-term care tends to be far less extensive than coverage of other issues,[9,23–25] The question, then, is how might the media help reinforce American's negative perceptions of NH providers if the extent of coverage is comparatively small? Clearly, the dominance of negative coverage may play a role in promoting these

perceptions. Just as important may be the relative prominence and unique focus of the negative coverage itself on industry actions/behaviors.

Consistent with prior research,[26–31] we found that non-neutral coverage was much more likely to be an opinion piece and tended to be longer and mention NHs more frequently than neutral articles. Negative articles were also more likely to focus on NH operators, in addition to appearing on the front page, an indicator readers use to judge issue saliency.[31,32] It is likely that the relative prominence of negative coverage has placed a spotlight on problems with the NH sector, thereby further shaping the public's adverse perceptions of the issue. Editorial decisions about the placement of such articles make sense from a business perspective to the extent that negative, sensationalistic coverage sells newspapers.

Relatively few positive stories were written about the NH sector. Virtually all were about quality. Positive articles were also more likely to be about residents/families, community actors and local issues. Together these findings suggest that a large proportion of positive coverage was devoted to highlighting local quality improvement initiatives, the most prominent of which include the culture change movement whereby operators make NHs more home-like environments.[33,34] This finding is consistent with research revealing that community-based mental health innovations have been portrayed more favorably than traditional hospital-based practices.[28] Extremely low levels of positive coverage suggests that NHs need to develop more effective media strategies that promote stories highlighting innovations and care practices that place the industry in a more favorable light.

Limitations

There are several limitations worth noting. First, the findings may not be generalizable to other newspapers given that coverage might vary across newspapers with different circulation levels, markets, audiences, and ownership.[20,23,26,35–39] Second, we may have missed some potentially relevant articles since we relied on a handful of general search terms. Third, coders may have interpreted the information abstracted differently despite efforts to promote consistency. Fourth, we relied on content analysis of a large number of articles. In-depth qualitative analysis would allow for a more nuanced examination of the cultural values and stereotypes underlying NH portrayals. This type of analysis would provide an important complement to the present study by further exploring how the emotional content of this highly charged topic is conveyed.

Conclusion

Overall, findings suggest that negative coverage of the NH sector predominates and that its impact on public perceptions may be reinforced by its prominence and focus on industry interests/behavior. This negative portrayal provides an interesting contrast to the large array of resources typically exerted by NH industry representatives seeking to influence the policy process.[40,41] Future research should examine the relative impact of industry advocacy efforts and negative media coverage on governmental decision making in this highly charged policy area. It should also examine the relative impact of negative media coverage on consumer expectations. NHs have faced increasing competition. On the Medicaid side, this is reflected in growth in the home- and community-based sector.[42] On the private side, it is reflected in rapid expansion in assisted living.[43] The adverse impact of media coverage on the industry's reputation has likely influenced consumer behavior, particularly in light of growing competition from alternative care sources with more robust reputations.[4,5]

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Table 1

Descriptive Statistics on All Study Variables (n=1,562)

	% (n)
Affect	
Tone	
Positive	10.5% (164)
Neutral	40.2% (630)
Negative	49.2% (768)
Prominence	
Editorial, Letter, Column	9.7% (151)
Location	
Front Page	10.0% (163)
Front Section	14.0% (211)
Elsewhere	76.0% (1188)
Number of Keywords	5.1 (5.4)[1]
Number of Words[1]	727.1 (626.2)[1]
2+ Articles	20.6% (322)
Themes	
Quality	57.0% (891)
Financing	33.5% (523)
Negligence/Fraud	29.5% (461)
Cost	10.2% (159)
Business/Property	6.3% (99)
Rebalancing	5.7% (89)
Natural Disasters	5.4% (84)
Access	2.9% (46)
Number of Themes	
1	54.7% (855)
2	28.3% (598)
3+	7.0% (109)
Other Attributes	
Focal Entity	
Government	42.0% (650)
Nursing Home	41.0% (633)
Residents/Families	12.0% (194)
Community	5.0% (84)
Geographic Focus	
National	34.0% (530)
State	34.0% (538)
Local	32.0% (494)
Volume	
Newspaper	

	% (n)
Los Angeles Times	41.6% (649)
Washington Post	7.3% (114)
Chicago Tribune	17.2% (268)
New York Times	34.0% (531)
Year	
1999	18.8% (295)
2000	16.5% (256)
2001	8.9% (139)
2002	7.3% (114)
2003	8.8% (138)
2004	6.8% (106)
2005	12.3% (192)
2006	7.4% (116)
2007	7.2 % (113)
2008	6.0% (94)

[1] Mean (Standard Deviation)

Table 2

Proportion of Nursing Home Articles by Tone by Article Characteristic (n=1,562)

	Positive n (%)	Neutral n (%)	Negative n (%)	χ^2-statistic (d.f.)	p-value
Prominence					
Editorial, Letter, Column	15.9% (26)	4.0% (26)	13.0% (100)	40.5 (2)	<.001
Location					
Front Page	9.8% (16)	7.1% (45)	13.3% (102)	20.2 (4)	<.001
Front Section	14.6% (24)	11.4% (72)	15.0% (115)		
Elsewhere	75.6% (124)	81.4% (513)	71.7% (551)		
Number of Keywords	5.4[1]	3.9	6.0	25.4 (2)[2]	<.001
Number of Words	811.2[1]	658.8	765.6	6.8 (2)[2]	<.001
2+ Articles	20.1% (33)	19.8% (125)	21.4% (164)	.511 (2)	.774
Themes					
Quality	89.0% (146)	47% (297)	58.3% (448)	94.2 (2)	<.001
Financing	13.4% (22)	43.8% (276)	29.3% (225)	65.9 (2)	<.001
Negligence/Fraud	1.8% (3)	14.4% (91)	47.8% (367)	252.5 (2)	<.001
Cost	7.9% (13)	12.2% (77)	9.0% (69)	5.0 (2)	.083
Business/Property	6.1% (10)	12.4% (78)	1.4% (11)	69.9 (2)	<.001
Rebalancing	8.5% (14)	7.3% (46)	3.8% (29)	10.8 (2)	.005
Natural Disasters	0.6% (1)	2.4% (15)	8.9% (68)	36.7 (2)	<.001
Access	3.7% (6)	2.9% (18)	2.9% (22)	.3 (2)	.849
Number of Themes					
1	73.8% (121)	59.7% (376)	46.6% (358)	51.5 (4)	<.001
2	22.0% (36)	34.8% (219)	44.7% (343)		
3+	4.3% (7)	5.6% (35)	8.7% (67)		
Other Attributes					
Focal Entity					
Government	21.3% (35)	52.2% (329)	37.2% (286)	185.9 (6)	<.001
Nursing Home	36.6% (60)	35.2% (222)	45.7% (351)		
Residents/Families	17.1% (28)	9.7% (61)	13.8% (106)		
Community	25.0% (41)	2.9% (18)	3.3% (25)		

	Positive n (%)	Neutral n (%)	Negative n (%)	χ²-statistic (d.f.)	p-value
Geographic Focus					
National	31.1% (51)	38.9% (245)	30.5% (234)	49.2 (4)	<.001
State	17.7% (29)	34.9% (220)	37.6% (289)		
Local	51.2% (84)	26.2% (165)	31.9% (245)		
Volume					
Newspaper					
Los Angeles Times	47.6% (78)	41.1% (259)	40.6% (312)	12.1 (6)	.060
Washington Post	6.1% (10)	6.7% (42)	8.1% (62)		
Chicago Tribune	20.7% (34)	14.9% (94)	18.2% (140)		
New York Times	25.6% (42)	37.3% (235)	33.1% (254)		
Year					
1999	26.8% (44)	19.2% (121)	16.8% (129)	57.0 (18)	<.001
2000	15.2% (25)	20.5% (129)	13.3% (102)		
2001	3.7% (6)	11.9% (75)	7.6% (58)		
2002	11.0% (18)	7.0% (44)	6.8% (52)		
2003	7.9% (13)	6.7% (42)	10.8% (83)		
2004	6.1% (10)	5.6% (35)	7.9% (61)		
2005	7.9% (13)	11.9% (75)	13.5% (104)		
2006	5.5% (9)	7.0% (44)	8.2% (63)		
2007	9.1% (15)	5.6% (35)	8.2% (63)		
2008	6.7% (11)	4.8% (30)	6.9% (53)		
Total	164 (100%)	630 (100%)	768 (100%)		

[1] mean,

[2] F (d.f.), Oneway ANOVA.

Table 3

Multinomial Logistic Regression Model of Article Tone (Positive and Negative v. Neutral)

Independent Variables	Positive Tone[1]		Negative Tone[1]	
	Beta	Odds Ratio	Beta	Odds Ratio
<u>Prominence</u>				
Editorial, Column, Letter	2.64 ***	14.07	2.46 ***	11.64
	(.40)		(.28)	
Location[2]				
Front Page	.26	1.30	.55 *	1.73
	(.39)		(.24)	
Front Section	−.04	.96	.31	1.36
	(.33)		(.21)	
Number of Keywords	.06 **	1.07	.08 ***	1.08
	(.02)		(.02)	
Number of Words (logged)	.80 ***	2.22	.40 ***	1.49
	(.15)		(.09)	
Number of Articles: 2+	−.34	.71	.13	1.14
	(.28)		(.16)	
<u>Themes</u>				
Quality	3.00 **	19.30	.38	1.46
	(.97)		(.38)	
Financing	.29	1.34	.19	1.21
	(.98)		(.39)	
Negligence/Fraud	−.88	.42	2.08 ***	7.96
	(1.06)		(.38)	
Cost	.77	2.17	.06	1.06
	(.98)		(.40)	
Business/Property	.62	1.87	−1.55 **	.21
	(1.00)		(.49)	
Rebalancing	1.82	6.17	−.48	.29
	(1.01)		(.45)	
Natural Disaster	−.66	.52	1.77 ***	5.87
	(1.43)		(.49)	
Access	1.92	6.83	.77	2.15
	(1.06)		(.53)	
Number of Themes				
Two[3]	−1.24	.29	−.34	.71
	(.95)		(.38)	
Three or More[3]	−2.44	.09	−.28	.76

Independent Variables	Positive Tone[1]		Negative Tone[1]	
	Beta	**Odds Ratio**	**Beta**	**Odds Ratio**
	(2.03)		(.76)	
Other Attributes				
Actor[4]				
Nursing Home Industry	.48	1.62	.53**	1.69
	(.28)		(.16)	
Residents/Family	.68*	1.98	.37	1.44
	(.35)		(.22)	
Community	2.33***	10.25	.59	1.80
	(.39)		(.37)	
Jurisdiction[5]				
State	−.25	.78	.22	1.25
	(.30)		(.16)	
Local	1.02***	2.78	.24	1.28
	(.27)		(.18)	
Volume				
Newspaper[6]				
Washington Post	−1.23*	.29	−.59*	.55
	(.48)		(.28)	
Chicago Tribune	.26	1.30	−.19	.83
	(.34)		(.21)	
New York Times	−.37	.69	−.41*	.67
	(.29)		(.17)	
Year[7]				
2000	−.75*	.47	−.34	.72
	(.35)		(.22)	
2001	−1.53**	.22	−.31	.74
	(.54)		(.27)	
2002	.35	1.41	−.06	.94
	(.42)		(.30)	
2003	−.24	.79	.61*	1.83
	(.44)		(.27)	
2004	−.08	.92	.39	1.47
	(.49)		(.30)	
2005	−.41	.67	−.19	.83
	(.43)		(.25)	
2006	−.033	.97	.04	1.04
	(.49)		(.29)	

Independent Variables	Positive Tone[1]		Negative Tone[1]	
	Beta	Odds Ratio	Beta	Odds Ratio
2007	.24	1.24	.43	1.54
	(.45)		(.30)	
2008	.08	1.09	.49	1.64
	(.48)		(.30)	
Constant	−9.31 ***	·	−3.93 ***	·
	(1.44)		(.71)	

N=1,562

−2 Log Likelihood (d.f.). 2,135.6 (66)***

Pseudo R^2 .415 (Cox and Snell), .488 (Nagelkerke)

*
p<.05;

**
p<.01;

***
p<.001

[1]
Reference: Neutral

[2]
Reference: Location: Elsewhere

[3]
Reference: One

[4]
Reference: Actor: Government

[5]
Reference: Jurisdiction: National

[6]
Reference: *Los Angeles times*

[7]
Reference: 1999