OMEGA, Vol. 58(4) 299-311, 2008-2009

THE INFLUENCE OF DEATH ATTITUDES AND KNOWLEDGE OF END OF LIFE OPTIONS ON ATTITUDES TOWARD PHYSICIAN-ASSISTED SUICIDE

STEVEN W. KOPP
University of Arkansas, Fayetteville

ABSTRACT

End of life decisions, such as physician-assisted suicide (PAS), have continued to be controversial as health care policy, moral, and individual health care issues. This study considers knowledge of end of life options and death attitudes as predictors of attitudes toward PAS. Data were gathered from approximately 300 adults through a mailing sent to a household research panel. Validated measures of attitudes toward PAS, knowledge about that state's assisted suicide laws, demographics, and attitudes toward death as measured through the Death Attitude Profile-Revised (DAP-R) were collected and analyzed. The data indicate that attitudes toward PAS are a function of knowledge of end of life options as well as death attitudinal factors.

End of life decisions, including physician-assisted suicide (PAS), have continued to be controversial as individual health care issues. In the past several years, public opinion polls have indicated that Americans are inconsistent in their support of the availability of physician-assisted suicide or other right-to-die institutions (Bachman, Alcser, Doukas, Corning, & Brody, 1996; Harris Poll, 2007; Pew Research Center, 2005). Research has suggested that there are significant differences in levels of support for end of life options across distinct groups. Several studies have provided evidence that demographic, cognitive, and attitudinal variables may play a very important role in predicting end of life

doi: 10.2190/OM.58.4.c
http://baywood.com

attitudes and ultimately decision making (Blevins, Preston, & Werth, 2006; Butt, Overholser, & Danielson, 2003; Worthen & Yeatts, 2000-2001). Attitudes toward PAS merit attention since they could influence the legislation on this topic, how patients are cared for in the future, and the decisions that individuals may make for themselves or their loved ones. The purpose of this article is to provide the results of a study that examines individuals' knowledge and attitudes related to physician-assisted suicide in a U.S. state in which PAS is not legal. Further, the study considers components of individual death attitudes as they are related to PAS knowledge and attitudes. A model predicting attitudes toward PAS is developed. The health care policy and theoretical implications of the study are then discussed.

PHYSICIAN-ASSISTED SUICIDE AS A HEALTH CARE ISSUE

The issue of physician-assisted suicide (PAS) has raised medical, legal, and ethical questions many times over the past 2 decades. This has resulted in significant changes in health care and public policy, as well as medical options available to patients (Rizzo, 2000). Currently, physician-assisted suicide is legal within specific parameters in one state, Oregon. Other states have considered various legislative models that would either allow or prohibit PAS. Surveys provide evidence that attitudes toward PAS (and related end of life health care concerns) are fluid (Duncan & Parmelee, 2006). The outcomes of individual attitudes related to PAS—for example, in the form of voting behavior or health care decision making at some point—are extremely important. Further, while technology has increased the medical system's capacity to extend life, this same technology has threatened the individual's sense of control, such that patients may have limited say in initiating the complex treatments that may keep them alive.

Currently, assisting suicide is illegal in every state but Oregon, and is explicitly banned by statute in 39 states. Even so, the specifics of end of life options vary significantly across states (Gunter-Hunt, Mahoney, & Sieger, 2002), arguably reflecting differences in attitudes and beliefs of residents in each state. Since the early 1990s, several states have initiated legislative actions or public referenda that have sought to legalize PAS, but these have failed far more often than they have succeeded. Public opinion concerning this issue has become increasingly important because widespread support could very well facilitate the legalization of these policies in other states, such as in Oregon.

Many studies have considered the antecedents and correlates to attitudes toward PAS for various groups of people. Other studies have examined knowledge of PAS legalities for both physicians and the general public (Silveira, DiPiero, Gerrity, & Feudtner, 2000). Although it is generally accepted that knowledge would predict attitudes, various attitudinal or other psychological measures have been considered independently of what people may know about the

laws governing PAS. The purpose of the present study is to explore individuals' knowledge about PAS along with attitudes toward death and how these may be related to attitudes toward PAS.

Correlates and predictors of PAS Attitudes and Knowledge

Previous research has considered both demographic and psychological attributes of individuals as they may be related to attitudes about PAS. Chronological age has been found to be negatively related to PAS attitudes in some studies (Butt et al., 2002-2003; Domino, 2003; Domino et al., 1997) but not others (Blendon et al., 1993). Studies that included gender or general education levels have tended to find no relationship with PAS attitudes (Butt et al., 2003; Cicirelli, MacLean, & Cox, 2000; Emanuel, Fairclough, Clarridge, Clum, Bruera, Penley, et al., 1996; Weiss, 1996; Worthen & Yeatts, 2000-2001). Studies have also found ethnicity and socioeconomic status to be significant predictors of attitudes toward physician-assisted suicide (Braun, Tanji, & Heck, 2001; Butt et al., 2002-2003; Domino, 2003; MacDonald, 1998).

Previous research has also examined relationships of psychological variables with attitudes toward end of life options. Much of this has tended to focus on various measures of spirituality, morality, and religious involvement (Cicirelli et al., 2000; O'Neill et al., 2003; Singh, 1979; Winter, Dennis, & Parker, 2007-2008; Worthen & Yeatts, 2000-2001) or other psychological characteristics related to mental health (Butt et al., 2003) or value orientations (Kemmelmeier, Burnstein, & Peng, 1999).

Knowledge of end of life options has also been examined. Silveira et al. (2000) addressed the question of how well informed people in Oregon were with respect to end of life alternatives. In 1997, the voters of Oregon passed the state's Death with Dignity Act, which allows doctors to prescribe, but not administer, a lethal dose of narcotics to patients diagnosed as having 6 months to live. Silveira et al. asserted that the effectiveness of legislation legalizing physician-assisted suicide would depend on patients' understanding of their legal rights in end of life care. A substantial percentage of respondents to their survey did not understand the parameters of the Oregon statute across a number of specific alternatives. A national survey conducted by the American Medical Association (1997) also provided evidence that people are not familiar with much of the terminology and are misinformed about terminal palliative medical care.

Although death attitudinal variables have been considered in relation to a variety of preferences, few studies have considered the relationship between death attitude components and attitudes and knowledge related to end of life alternatives. Rogers (1996) pointed out that death attitudes might be related to right-to-die attitudes but there has been little empirical evidence to support the

expectation. Cicirelli, MacLean, and Cox (2000) found that elders who expressed a preference to extend life regardless of the quality of life had a greater fear of the unknown. Given the previous discussion, the current study applies existing measures of both attitudes and knowledge regarding end of life options and also considers the role death attitudes may play in this process.

METHOD

Sample

The data presented here are derived from responses to a geographically stratified household research mail survey in a southern state. Three hundred adults responded. Survey respondents ranged in age from 23 to 87 (average = 54.8). Thirty-five percent were male and 65% were female. Twenty-four percent of the respondents reported completing high school, 31% held a college degree, and 15% held some type of graduate degree. Median income was between $24,000-$36,000. Of the respondents surveyed, 24% were single or divorced, 66 % were married, and 9% had been widowed.

Measures

Physician-Assisted Suicide Attitude Scale

In order to assess attitudes related to physician-assisted suicide, Emanuel et al. (1996) developed a survey instrument using four vignettes describing a patient with terminal cancer. Each vignette presented a different set of circumstances: the patient suffered from excruciating pain, was debilitated to the point of being bedridden, was concerned about being a burden to his family, and found life meaningless to the point of wishing to avoid a drawn-out death process. The present study used a modified (print) version of the scale. One question at the end of each vignette asked if, at the request of the patient, it was "all right" for a physician to administer increasing doses of morphine even if premature death was a likely outcome; a second question asked if it was "all right" for the physician to intentionally end or help end the patient's life by overdose of drugs. Responses were summed such that higher scores indicated more favorable attitudes toward PAS.

Knowledge of Options at the End of Life

Silveira et al. (2000) sought to assess Oregon residents' knowledge of their legal options near the end of life. Specifically, the survey consists of a vignette that follows a hypothetical cancer patient through a series of medical events. In the vignette, both the patient and his doctor must make several decisions regarding the refusal of treatment, withdrawal of treatment, euthanasia, assisted suicide, and

"double effect" (wherein a physician would administer increasing dosages of pain killer to the point of lethality). After each section of the vignette, respondents were asked questions in the following format: "In Oregon, does a patient who has less than 6 months to live have the legal right to . . . ?" or "In Oregon, is it legal for a physician to . . . ?" Respondents could answer "Yes, in all cases," "Yes, in some cases," "No," or "Don't know." The state laws in which the current survey was administered are different than those of Oregon, so the appropriate substitution was made in the wording of the survey. A total of nine questions comprise this survey.

Death Attitude Profile-Revised (DAP-R)

The Death Attitude Profile-Revised (DAP-R) is a standardized instrument (Wong, Reker, & Gosser, 1994) which is used to measure attitudes toward death and dying. The scale is intended to capture two components of death attitudes using five subscales. Death acceptance consists of the cognitive awareness of one's own finitude and the affective reaction to this knowledge. Three types of death acceptance are measured, while the fear of death and the reaction to this fear (death avoidance) are also integrated. For the purposes of this study, measurement of death acceptance is important, because knowledge and attitudes regarding end of life decisions would require acceptance of the inevitability of death. The DAP-R scale consists of 32 items that measure five dimensions of death attitudes: Approach Acceptance, Escape Acceptance, Neutral Acceptance, Fear of Death, and Death Avoidance.

Approach Acceptance

The "Approach Acceptance" subscale measures the belief in an afterlife and a desire to go there (e.g., item 13 states: "I believe that heaven will be a much better place than this world"). These items suggest that death provides access to a pleasant afterlife.

Escape Acceptance

Death may represent to some people an escape from the pain and misery of life. Escape acceptance is a positive attitude toward death, based on what may be the negative aspects of living. Items reflecting escape acceptance on the DAP-R include statements include "Death will bring an end to all my troubles."

Neutral Acceptance

Neutral acceptance of death comprises "an ambivalent or indifferent attitude" (Wong et al., 1994), through which one accepts death as a fact of life. Items on the DAP-R include statements such as "Death is neither good nor bad." The scale

developers have suggested that neutral acceptance is "most adaptive" (p. 140), in that when individuals accept the inevitability of death as a reality of life, they may make the best use of their lives.

Fear of Death

Fear of death directly measures the individual's awareness of the realities of death. Respondents demonstrate a willingness to be aware of their mortality as opposed to their denial of death. Fear of death allows an individual to confront death and the feelings that it evokes (e.g., item 18 states: "I have an intense fear of death").

Death Avoidance

An individual avoids thinking or talking about death in order to reduce death anxiety. This is reflected through items such as "I avoid thinking about death altogether" (item 19). The scale developers suggested that death avoidance interferes with the ability of individuals to deal with subconscious thoughts of death.

Demographics an Other Individual Variables

Individual data were also gathered including age, gender, level of education, race, income, religious practice (measured as frequency of church attendance), and a 2-item measure of self-assessed health status (Moorman & Matulich, 1993).

RESULTS

Descriptive statistics for the measures are provided in Table 1. Most of the measures were highly reliable, with the exception of the "neutral acceptance" DAP-R subscale. Reliabilities for the five DAP-R subscales were acceptable and consistent with earlier applications of the scale (Clements & Rooda, 1999-2000; Wong et al., 1994). Coefficient α for each of the other scales was within acceptable range.

Knowledge of End of Life Options

Table 2 provides the percentages of responses for each of the nine items on the Knowledge of End of Life Options scale. The first three questions on the End of Life Options survey dealt with the patient's refusal of treatment, intravenous fluids, and feeding tube. Sixty-one percent of respondents correctly understood that patients in their state can legally refuse life-saving or life-extending chemotherapy, but were significantly less knowledgeable with respect to a patient's legal right to refuse hydration or nutrition as medical treatment.

Table 1. Descriptive Statistics for Measures

	Reliability	Mean (*SD*)
PAS Attitudes (range = 8-16)	.90	10.53 (2.60)
Knowledge of End of Life Options (range = 0-9)	.88	4.44 (2.54)
Approach Acceptance (range = 10-70)	.95	57.03 (14.33)
Fear of Death (range e= 7-49)	.83	22.64 (8.98)
Death Avoidance (range = 5-35)	.87	16.01 (6.80)
Escape Acceptance (range = 5-35)	.84	25.51 (7.27)
Neutral Acceptance (range = 5-35)	.58	28.84 (4.33)

Respondents were even less knowledgeable about the withdrawal of treatment, with one-third correctly responding that patients in the state can legally withdraw life-sustaining treatment in all cases.

Almost 80% of respondents correctly recognized that active euthanasia (described in the vignette as "injecting a medication that would cause a patient's immediate death") is illegal. Fewer respondents recognized, however, that physician-assisted suicide (represented in the question as "prescribing a medication and providing advice so that a patient can take medications that will end his life") is not legal; still, more than two-thirds of respondents provided the correct response to this question. Just over a quarter of the respondents correctly recognized that "double effect" (where "giving pain medications with the goal of relieving pain and suffering even if death may occur as a result") is legal in this state. Respondents were less certain, given the number of "don't know" answers, with respect to the legal situations involving withdrawal of treatment, double effect, and physician-assisted suicide.

Table 3 provides correlations between PAS attitudes, demographic variables, knowledge, and components of the DAP-R.

Table 2. Percentage Responses by Topic[a]

Topic	Response, %				
	Yes in all	Yes in some cases	Don't' know	No legal right	Total responding to question
Refusal of treatment	**61.5**	15.9	1.0	20.5	297
Refusal of hydration	**52.4**	19.6	24.7	3.4	296
Refusal oaf nutrition	**52.9**	19.9	23.6	3.7	297
Withdrawal	**33.7**	22.9	30.6	12.8	297
Euthanasia	.7	1.7	18.3	**79.0**	295
Assisted suicide	2.4	1.4	25.4	**70.8**	295
Double effect	**27.6**	28.9	34.7	8.8	294

[a]**Bold numbers** indicate percentage of respondents answering correctly.

Predictors of PAS Attitudes

A hierarchical regression model was tested to determine predictors of attitudes toward PAS. Demographic variables and knowledge of PAS were entered as separate initial steps in order to assess their impact on PAS attitudes. In the third block, the Death Attitude Profile components were entered.

Table 4 shows the results from the predictive model. The first block of the regression, including the interval demographic variables, significantly predicted positive attitudes toward PAS ($\Delta R^2 = .101$, $p = .000$). Of the individual variables included, only income and the measure of religious involvement (frequency of church attendance) were marginally significant predictors, with income positively related to more positive PAS attitudes ($\beta = .113$, $p = .060$), and more frequent church attendance associated with more negative PAS attitudes ($\beta = –.121$, $p = .065$). Knowledge of end of life options, entered as the second block of the model, was also a significant predictor ($\Delta R^2 = .034$, $p = .000$), in a negative direction. Considered together, the components of the Death Anxiety Profile-Revised increased the predictive ability of the model ($\Delta R^2 = .081$, $p = .000$). Of the five DAP-R subscales, Approach Acceptance was negatively related to positive PAS attitudes ($\beta = –.332$, $p = .000$). Neutral Acceptance ($\beta = .118$, $p = .052$) was a significant and positive predictor, while Death Avoidance was positive and

Table 3. Correlations among Study Variables

	Attitudes toward PAS	PAS knowledge	Age	Education	Income	Race	Religious practice	Health status	Approach acceptance	Fear of Death	Death Avoidance	Escape Avoidance	Neutral acceptance
Attitudes toward PAS	1												
PAS knowledge	−.195**	1											
Age	.048	−.040	1										
Education	.082	.062	.247**	1									
Income	.124*	.161**	.207**	.402**	1								
Race[a]	−.115	−.090	−.105	−.070	−.138*	1							
Religious practice	−.265**	.064	.331**	.324**	.211**	.010	1						
Health status	−.021	.043	−.059	.074	.190**	−.054	−.032	1					
Approach acceptance	−.412**	.214**	.044	.007	−.008	−.100	.459**	−.009	1				
Fear of death	.142*	−.082	−.160**	−.102	−.133*	.035	−.227**	−.126*	−.236**	1			
Death avoidance	.030	−.051	−.135*	−.090	−.108	.092	−.172**	−.031	−.091	.608**	1		
Escape acceptance	−.225**	.151*	.104	−.111	−.044	−.071	.271**	−.045	.499**	−.098	−.066	1	
Neutral acceptance	−.006	.110	.193**	.036	.066	−.094	.076	−.063	.333**	−.193**	−.193**	.274**	1

[†]Race was converted into a dichotomous variable, with 1 = white, 2 = minority, because of the relatively small proportion of minority respondents.
*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).

Table 4. Regression Results

	Variables	Beta	*t*	Significance	ΔR^2	*p*-Value
Block 1	Age	.040	.720	.472	.101	.000
	Gender	–.082	–1.393	.165		
	Education	.077	1.343	.181		
	Income	.113	1.832	.068		
	Race	–.062	–1.116	.266		
	Religious practice	–.121	–1.891	.060		
	Health status	–.036	–2.915	.525		
Block 2	PAS knowledge	–.162	–2.915	.004	.034	.000
Block 3	Approach Acceptance	–.332	–4.655	.000	.081	.00
	Fear of Death	.127	1.794	.074		
	Death Avoidance	–.065	–.941	.348		
	Escape Acceptance	–.018	–.284	.777		
	Neutral Acceptance	.118	1.949	.052		

marginally significant ($\beta = .127$, $p = .074$). The model explained a total of 22.6% of the variance in attitudes toward physician assisted suicide.

DISCUSSION

The results from this study provide evidence of factors that are associated with support for physician-assisted suicide. First, levels of general education were not associated with either greater knowledge about physician-assisted suicide or attitudes toward PAS. However, specific knowledge about PAS was a significant predictor of attitudes toward PAS. So, while a large proportion of respondents did not know which end of life practices were legal, especially those related to the withdrawal of treatment and "double effect," respondents who were more knowledgeable tended to express less support for PAS. This is consistent with studies that have provided evidence that the less physicians know about end of life care, the more they favor assisted suicide or euthanasia (Emanuel et al., 2000; Schildmann, Herrmann, Burchardi, Schwantes, & Vollmann, 2006; Duckett, Rowan-Boyer, Ryden, Crisham, Savik, & Rest, 1992). In this case, the more individuals know, the less they approve of PAS.

Second, previous research has found that various measures of religiosity are predictors of PAS attitudes (Kaplan, Flicker, Wallrabenstein, Dodge, Laird, Theil, et al. 2008; O'Neill et al., 2003; Weiss, 1996), and that negative relationship is supported in the present study as well, both directly and indirectly. The

more direct measure of religious participation was found to be associated with decreasing levels of acceptability for PAS, but was not related to PAS knowledge.

Indirectly, the strongest individual predictor of PAS attitudes among the five Death Attitude Profile measures was Approach Acceptance. In a conceptual sense, Approach Acceptance is perhaps the most "religious" of the DAP-R measures, in that its primary focus is on belief in happy afterlife. Religious affiliation and involvement have been found to be strongly related to belief in afterlife (Klenow & Bolin, 1989; Peterson & Greil, 1990). In the present study, individuals who expressed the belief in a pleasant afterlife tended to be less supportive of physician-assisted suicide options but also tended to be more knowledgeable.

Increasing levels of Fear of Death and Neutral Acceptance were both related to more favorable attitudes toward PAS, and neither was related to knowledge of PAS. As individuals' awareness of the limits of mortality increase, and as they tend to view death as a part of life, their approval of ending life through medical means increases. Wong, Reker, and Gesser (1994) have speculated that fear of death derives from an individual's failure to find personal meaning from one's life. It is possible that a patient in a situation where PAS is an option is viewed as having a less meaningful life.

Previous research has examined relationships among individual attitudes and other characteristics related to physician assisted suicide with respect to decisions, expectations, and preferences for care (Blevins et al., 2005; Emanuel, Hsu, Starks, & Back, 1996; Pearlman et al., 2005). Future research may be encouraged undertake longitudinal studies in order to examine behavioral intention with respect to PAS attitudes as they may be related to choices. Along the same lines, future researchers will need to be clear in interpreting their results with respect to individual attitudes about end of life options whether for self (Cicirelli et al., 2000) or for someone else (Emanuel et al., 1996). Future research may also consider more fundamental cross-cultural attitudes toward death as predictors of attitudes toward PAS.

REFERENCES

American Medical Association. (1997). Poll: The more patients know, the less they want suicide aid. *American Medical News*, January 13, p. 3.

Bachman, J. G., Alcser, K. H., Doukas, D. J., Corning, R. L., & Brody, H. (1996). Attitudes of Michigan physicians and the public toward legalizing physician-assisted suicide and voluntary euthanasia. *New England Journal of Medicine, 334*(3), 303-309.

Blendon, R. J., Szalay, U. S., & Knox, R. A. (1992). Should physicians aid their patients in dying? The public perspective. *Journal of the American Medical Association, 267*(19), 2658-2662.

Blevins, D., Preston, T. A., & Werth, Jr., J. L. (2005). Characteristics of persons approving of physician-assisted suicide. *Death Studies, 29*(7), 601-623.

Braun, K. L., Tanji, V. M., & Heck, R. H. (2001). Support for physician-assisted suicide: Exploring the impact of ethnicity and attitudes toward planning for death. *Gerontologist, 41*(1), 51-60.

Butt, Z. A., Overholser, J. C., & Danielson, C. K. (2003). Predictors of attitudes towards physician-assisted suicide. *Omega, 47*(2), 107-117.

Cicirelli, V. G., MacLean, A. P., & Cox, L. S. (2000). Hastening death: A comparison of two end-of-life decisions. *Death Studies, 24*(5), 401-420.

Clements, R., & Rooda, L. A. (1999-2000). Factor structure, reliability, and validity of the death attitude profile-revised. *Omega, 40*(3), 453-455.

Domino, G. (2003). Community attitudes toward physician assisted suicide. *Omega, 46*(3), 199-214.

Domino, G., Kempton, S., & Cavender, J. (1997). Physician assisted suicide: A scale and some empirical findings. *Omega, 34*(3), 247-257.

Duckett, L., Rowan-Boyer, M., Ryden, M. B., Crisham, P., Savik, K., & Rest, J. R. (1992). Challenging misperceptions about nurses' moral reasoning. *Nursing Research, 41,* 324-331.

Duncan, O. D., & Parmelee, L. F. (2006). Trends in public approval of euthanasia and suicide in the U.S., 1947-2003. *Journal of Medical Ethics, 32*(5), 266-272.

Emanuel, E. J., Fairclough, D., Clarridge, B. C., Blum, D., Bruera, E., Penley, W. C., Schnipper, L. E., & Mayer, R. J. (2000). Attitudes and practices of U.S. oncologists regarding euthanasia and physician-assisted suicide. *Annals of Internal Medicine, 133*(7), 527-532.

Gunter-Hunt, G., Mahoney, J. E., & Sieger, C. E. (2002). A comparison of state advance directive documents. *Gerontologist, 42*(1), 51-60.

Harris Poll. (2005). Views on social issues and their potential impact on the presidential election. #91 (September 18). Found at: http://www.harrisinteractive.com/harris_poll/index.asp?PID=807

Kaplan, K. J., Flicker, L., Wallrabenstein, I., Dodge, N., Laird, P., Theil, K., & Folk, M. (2008). Why does Zeno the Stoic hold his breath? "Zenoism" as a new variable for studying suicide. *Omega: Journal of Death & Dying, 56*(4), 369-400.

Kemmelmeier, M., Burnstein, E., & Peng, K. (1999). Individualism and authoritarianism shape attitudes toward physician-assisted suicide. *Journal of Applied Social Psychology, 29*(12), 2613-2631.

Klenow, D. J., & Bolin, R. C. (1989). Belief in an afterlife: A national survey. *Omega, 20*(1), 63-74.

MacDonald, W. L. (1998). The difference between blacks' and whites; attitudes toward voluntary euthanasia. *Journal for the Scientific Study of Religion, 37*(3), 411-426.

Moorman, C., & Matulich, E. (1993). A model of consumes' preventive health motivation and health ability. *Journal of Consumer Research, 20*(2), 208-228.

O'Neill, C., Feenan, D., Hughes, C., & McAlister, D. A. (2002). Attitudes to physician and family assisted suicide: Results from a study of public attitudes in Britain. *Journal of Medical Ethics, 28*(1), 52.

Pearlman, R. A., Hsu, C., Starks, H., & Back, A. L. (2005). Motivations for physician-assisted suicide: Patient and family voices. *Journal of General Internal Medicine, 20*(3), 234-239.

Peterson, S. A., & Greil, A. L. (1990). Death experience and religion. *Omega, 21*(1), 251-265.

Pew Research Center (2006). Strong public support for right to die: More Americans discussing—and planning—end-of-life treatment (January 5). Found at: http://people-press.org/reports/display.php3?ReportID=266

Rizzo, R. F. (2000). Physician-assisted suicide in the United States: Underlying factors in technology, health care, and palliative medicine (Part One). *Theoretical Medicine, 21*(3), 277-289.

Rogers, J. R. (1996). Assessing right to die attitudes: A conceptually guided measurement model. *The Journal of Social Issues, 52*(2), 63-84.

Schildmann, J., Herrmann, E., Burchardi, N., Schwantes, U., & Vollmann, J. (2006). Physician assisted suicide: Knowledge and views of fifth-year medical students in Germany. *Death Studies, 30*(1), 29-39.

Silveira, M. J., DiPiero, A., Gerrity, M. S., & Feudtner, C. (2000). Patients' knowledge of options at the end of life. *Journal of the American Medical Association, 284*(19), 2483-2488.

Singh, B. K. (1979). Correlates of attitudes toward euthanasia. *Social Biology, 26*(3), 247-254.

Tordella, M. J., & Neutens, J. J. (1979). An instrument to appraise attitudes of college students toward euthanasia. *The Journal of School Health, 49*(6), 351-352.

Weiss, G. L. (1996). Attitudes of college students about physician-assisted suicide: The influences of life experiences, religiosity, and belief in autonomy. *Death Studies, 20*(6), 587-599.

Winter, L., Dennis, M. P., & Parker, B. (2007-2008). Religiosity and preferences for life-prolonging medical treatments in African-American and white elders: A mediation study. *Omega, 56*(3), 273-288.

Wong, P. T. P., Reker, G. T., & Gosser, G. (1994). Death Attitude Profile–Revised: A multidimensional measure of attitudes toward death. *Death Anxiety Handbook* (pp. 121-148). R. A. Neimeyer (Ed.). Washington, DC: Taylor & Francis.

Worthen, L. T., & Yeatts, D. E. (2000-2001). Assisted suicide: Factors affecting public attitudes. *Omega, 42*(2), 115-135.

Direct reprint requests to:

Steven W. Kopp, PhD
Associate Professor
Department of Marketing & Logistics
Sam M. Walton College of Business
302 WCOB
Fayetteville, AR 72701
e-mail: skopp@walton.uark.edu