Physicians' Willingness To Participate in the Process of Lethal Injection for Capital Punishment

Neil J. Farber, MD; Brian M. Aboff, MD; Joan Weiner, PhD; Elizabeth B. Davis, PhD; E. Gil Boyer, EdD; and Peter A. Ubel, MD

Background: **It has been found that physicians condone colleague involvement in capital punishment. Physicians' own willingness to participate has not been explored.**

Objective: **To examine physicians' willingness to be involved in cases of capital punishment.**

Design: **Survey exploring physicians' willingness to participate in 10 aspects of capital punishment by lethal injection, 8 of which are disallowed by the American Medical Association.**

Setting: **United States.**

Participants: **1000 randomly selected practicing physicians.**

Measurements: **Questions assessing willingness to be involved in and attitudes toward capital punishment.**

Results: **41% of respondents indicated that they would perform at least one action disallowed by the American Medical Association; 25% would perform five or more disallowed actions. Perceived duty to society ($P < 0.001$), approval of the death penalty ($P < 0.001$), and approval of assisted suicide ($P = 0.015$) correlated with increased willingness to perform disallowed actions. Only 3% of respondents knew of any guidelines on this issue.**

Conclusions: **Despite medical society policies, many physicians would be willing to be involved in the execution of adults. The medical profession needs to be better informed about the ethical issues involved in physician participation in capital punishment.**

Ann Intern Med. 2001;135:884-888. www.annals.org

For author affiliations, current addresses, and contributions, see end of text.

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Occasionally, physicians' personal values conflict with their perceived societal duties. One example is the case of lethal injection for the purpose of capital punishment (1). Some states require that such lethal injections be performed by physicians (2, 3). At the same time, leading medical societies have concluded that physicians should avoid participating in capital punishment (4, 5).

Physicians' attitudes toward involvement in capital punishment may depend on how they balance their responsibilities to individuals against their duties to society (6). Other factors may include a desire to provide a more painless death for the prisoner or concern over the competency of other health care personnel (7). In a previous survey (8), we found that a majority of physicians condoned involvement of their fellow physicians in capital punishment. For the current study, we conducted another survey to ascertain physicians' attitudes about their own involvement in capital punishment, as well as factors associated with these attitudes.

METHODS

We conducted a cross-sectional mailed survey of 1000 randomly selected practicing physicians in the United States, identified through the American Medical Association (AMA) master file, the most thorough listing of physicians available. Students, residents, and nonpracticing physicians were excluded. The sample was otherwise not stratified. The institutional review board of Christiana Health Care System approved the study.

Each physician received an anonymous questionnaire and a $5 incentive. A second questionnaire was mailed to all nonrespondents. All responses received before 1 June 1999 were included in the analysis. The questionnaire asked respondents how willing they would be to personally participate in different aspects of capital punishment. Responses were based on a 4-point Likert-type scale. The tested aspects included eight actions disallowed by the AMA and two actions that the AMA permits (see Appendix, available at www.annals.org) (9). Attitudes about the death penalty and assisted suicide, as well as physicians' opinions on different aspects of physician involvement in capital punishment, were assessed by using Likert-type scales (Appendix). These attitudinal questions were developed from a survey of the literature (1, 10–14), as well from a qualitative assessment of comments from our first survey (8), and were pretested for face and content validity.

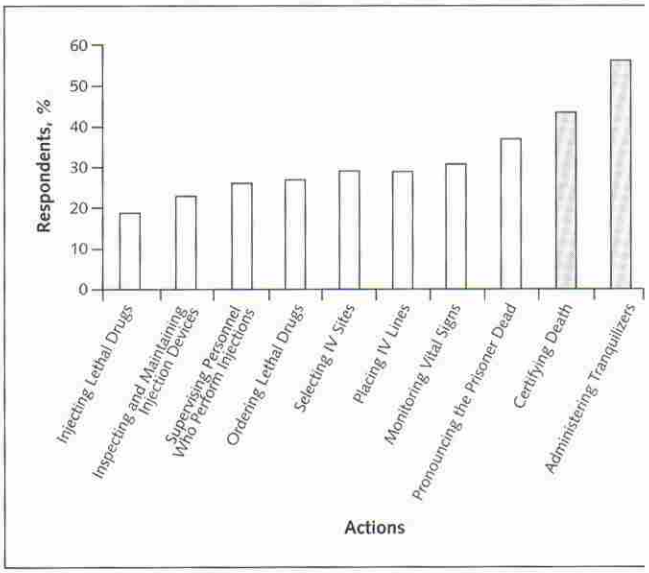
Two of the authors manually entered data for analysis. Thirty percent of the sample was cross-checked, and no errors were detected. The number of disallowed

Table. **Characteristics and Attitudes of 413 Physicians Who Responded to a Survey Assessing Involvement in Lethal Injection for Capital Punishment***

Characteristic	Value
Demographic	
Mean age ± SD, *y*	50 ± 11
Sex, *n (%)*	
Male	314 (76)
Female	92 (22)
Marital status, *n (%)*	
Married	344 (83)
Divorced	22 (5)
Single	32 (8)
Widowed	4 (1)
Ethnicity, *n (%)*	
African American	20 (5)
White	302 (73)
Asian	60 (14)
Hispanic	7 (2)
Religion, *n (%)*	
Protestant	139 (34)
Catholic	101 (24)
Jewish	74 (18)
Islamic	5 (1)
Atheist	15 (4)
Other†	69 (17)
Religiosity, *n (%)*	
Very religious	103 (25)
Somewhat religious	209 (51)
Not very religious	58 (14)
Not at all religious	35 (8)
Ever a victim of violence or related to a victim of violence, *n (%)*	
Yes	101 (24)
No	306 (74)
Professional	
Specialty, *n (%)*	
Internal medicine	101 (24)
Surgery	85 (21)
Family practice	65 (16)
Pediatrics	46 (11)
Psychiatry	33 (8)
Anesthesia	29 (7)
Obstetrics–gynecology	23 (6)
Emergency medicine	12 (3)
Physical medicine and rehabilitation	5 (1)
Practice type, *n (%)*‡	
Private practice	267 (65)
Academic medicine	67 (16)
Health maintenance organization	30 (7)
Veterans Affairs	6 (1)
Other	71 (17)
Practice locale, *n (%)*	
Urban	172 (42)
Suburban	155 (37)
Rural	74 (18)
Mean proportion of time spent seeing patients ± SD, %	84 ± 22
Mean proportion of practice devoted to primary care ± SD, %	45 ± 45
Current AMA member, *n (%)*	
Yes	147 (36)
No	260 (63)
Ever an AMA member, *n (%)*	
Yes	299 (72)
No	108 (26)
Geographic location of practice, *n (%)*	
Northeast	95 (23)
South	127 (31)
Midwest	94 (23)
West	85 (21)
Practice in state with death penalty, *n (%)*	
Yes	349 (84)
No	52 (13)
Attitude toward death penalty, *n (%)*	
Oppose under all circumstances	93 (23)
Oppose or favor depending on circumstances	232 (56)
Favor under all circumstances	79 (19)
Effect of death penalty on the murder rate, *n (%)*	
Somewhat or significantly lowers the murder rate	184 (45)
Does not affect or increases the murder rate	219 (53)
Favor physician-assisted suicide, *n (%)*	
Yes	146 (35)
No	140 (34)
Unsure	118 (29)
Statements about capital punishment	
Physicians should not develop a patient–physician relationship with a prisoner who is about to be executed.	
Agree, *n (%)*	222 (54)
Disagree, *n (%)*	174 (42)
A physician acts primarily as a member of society rather than as a medical professional when performing an execution of a prisoner via lethal injection	
Agree, *n (%)*	227 (55)
Disagree, *n (%)*	171 (41)
Some nurse practitioners or other ancillary personnel are as capable in performing the procedures of capital punishment as are qualified physicians	
Agree, *n (%)*	320 (77)
Disagree, *n (%)*	76 (18)
One of the reasons physicians should be involved in capital punishment is their duty to society	
Agree, *n (%)*	90 (22)
Disagree, *n (%)*	312 (75)
Lethal injection for capital punishment uses technology but does not involve medical care	
Agree, *n (%)*	262 (63)
Disagree, *n (%)*	141 (34)
Patients suffer less when physicians perform an execution via lethal injection than when any other groups, such as nurse practitioners or prison personnel, perform them	
Agree, *n (%)*	63 (15)
Disagree, *n (%)*	331 (80)

* Not all respondents answered every question. Some values do not add up to 100% because of rounding and nonresponses. AMA = American Medical Association.
† Includes Hindu and Buddhist.
‡ Respondents were asked to check all categories that applied. Values add up to more than 100% because of multiple choices.

Figure. **Percentage of physicians surveyed ($n = 413$) who were willing to perform actions involving capital punishment by lethal injection that are allowed and disallowed by the American Medical Association.**



White bars indicate disallowed actions; shaded bars indicate allowed actions. IV = intravenous.

actions that the respondents were definitely willing to perform or were somewhat willing to perform was calculated as a separate variable. Associations between attitudinal and sociodemographic variables and the number of disallowed actions that respondents were willing to perform were analyzed by using chi-square tests or the Kendall tau correlation, as appropriate. Binomial regression analysis was used to determine which associated variables were significant.

The funding sources had no role in the collection, analysis, or interpretation of the data or in the decision to submit the paper for publication.

RESULTS

Of 1000 questionnaires, 25 were returned undelivered, 11 were sent to physicians who had retired from practice, and 2 were sent to physicians who had died. Of the 962 physicians who received surveys, 413 (43%) returned them. Respondents' demographic and professional characteristics and attitudes toward the death penalty and assisted suicide are shown in the **Table**.

The percentage of respondents agreeing to perform the disallowed actions varied from 19% for administering the lethal drugs to 36% for determining death (**Figure**). Twenty-five percent of respondents were willing to perform five or more of the disallowed actions, while 14% were willing to perform all eight disallowed actions. Forty-one percent of respondents were willing to perform at least one disallowed action, and 59% were willing to perform none of the disallowed actions. Of interest, 11 physicians were unwilling to give tranquilizers the night before the execution yet were willing to perform five or more of the disallowed actions.

Physicians who were in favor of the death penalty were willing to perform more disallowed actions than physicians who were opposed to capital punishment ($P < 0.001$). Physicians who believed that capital punishment reduced the murder rate were willing to perform more disallowed actions than physicians who believed that capital punishment did not affect or actually increased the murder rate ($P < 0.001$). Physicians who approved of assisted suicide were willing to perform more disallowed actions than physicians who opposed assisted suicide or were not sure what was appropriate ($P = 0.015$).

Most of the statements on capital punishment, when respondents agreed with them, were associated with an increased number of disallowed actions that respondents were willing to perform. Only the belief that lethal injection involves only technological skill, not patient care, and the belief that nurse practitioners are as capable as physicians in conducting lethal injections were not associated with an increased willingness to perform disallowed actions.

Most of the demographic characteristics had no significant association with the number of disallowed actions deemed acceptable. However, physicians who were ever members of the AMA were more willing to perform disallowed actions ($P < 0.01$). All significant attitudinal and demographic variables were entered into a binomial regression model. Past or present membership in the AMA ($P < 0.05$), belief that duty to society is a reason for physician involvement in capital punishment ($P < 0.001$), and belief that physicians should not develop a patient–physician relationship with prisoners about to be executed ($P < 0.05$), along with attitudes toward the death penalty ($P < 0.001$) and toward assisted suicide ($P = 0.05$), had a significant effect on the number of disallowed actions that respondents would be willing to perform ($R^2 = 0.574$).

DISCUSSION

This study demonstrates that physicians are willing to be involved in lethal injections for capital punishment even though such involvement is contrary to the best interests of the prisoner, is in violation of the Hippocratic Oath (15), and is prohibited by most medical societies (4, 5).

Similar to our previous study (8), we found that physicians who supported the death penalty and were in favor of assisted suicide were willing to perform more of the disallowed actions. While physicians have argued that involvement in capital punishment affords a more rapid and humane death for convicts (4, 6, 16), in this study, the only aspect of the lethal injection process associated with respondents' willingness to perform the disallowed procedures was perceived duty to society. Pellegrino (12) has pointed out that in situations involving capital punishment, physicians face competing values: the requirement to fulfill legally or socially prescribed roles (as an agent of society as a whole) and a responsibility to the patient (as a member of the medical profession). In our survey, some physicians felt that duty to society outweighed their concerns about the mandate to do no harm to the individual. While for some physicians the social role of acting as a punitive agent for the state is unacceptable (17), for others their societal responsibility is paramount and cannot be delegated (13).

Some of the physicians in our study may have made specific value choices because they lacked education about the ethical issues involved. Only 3% of the respondents knew of any guidelines on this subject, yet AMA membership was associated with a willingness to perform more AMA-disallowed actions. Greater effort will need to be made to ensure that all physicians are aware of the ethical concerns regarding physician participation in capital punishment.

This study has several limitations. First, given the response rate of 43%, nonrespondent bias is likely. However, the age, sex, and specialty distribution of our survey respondents was similar to that of physicians in practice in the United States in 1996 (18). Moreover, even if all of the nonrespondents had reported avoiding involvement in all of the disallowed actions of capital punishment, there would still have been 11% of respondents willing to perform five or more disallowed actions and 18% willing to perform at least one. Regardless of the small size of these numbers, the fact that some physicians would be willing to perform actions involving lethal injections is of concern. Second, we do not know whether any of the respondents were involved in cases of capital punishment. If so, some bias would be introduced into the study. Third, and more important, we do not know whether surveyed physicians would actually perform the actions as stated in their responses.

Some physicians are willing to participate in cases of capital punishment despite prohibitions by several medical associations. While support of the death penalty and support of assisted suicide are associated with a greater willingness to participate, physicians may be basing some of their reasoning on their perceived duty to society rather than their responsibility to the prisoner. This issue needs to be discussed at a societal level. Furthermore, increased effort must be made to educate physicians about the ethical concerns involved in participation in capital punishment.

From Christiana Health Care System, Wilmington, Delaware; and Drexel University, St. Joseph's University, and University of Pennsylvania, Philadelphia, Pennsylvania.

Grant Support: By the Osler Fund, Department of Medicine, Christiana Care Health System. Dr. Ubel is a recipient of a Career Development Award in health services research from the Department of Veterans Affairs and is a Robert Wood Johnson Generalist Physician Faculty Scholar.

Requests for Single Reprints: Neil J. Farber, MD, Department of Medicine, Christiana Care Health System, 501 West 14th Street, Wilmington, DE 19899; e-mail, nfarber@christianacare.org.

Current Author Addresses: Drs. Farber and Aboff: Department of Medicine, Christiana Care Health System, 501 West 14th Street, Wilmington, DE 19899.

Dr. Weiner: Management Department, Drexel University, Philadelphia, PA 19104.

Dr. Davis: Administrative Sciences, George Washington University, 2136 Pennsylvania Avenue, 301, Washington, DC 20052.

Dr. Boyer: Department of Management and Information Systems, Mandeville Hall, St. Joseph's University, 5600 City Avenue, Philadelphia, PA 19131.

Dr. Ubel: Ann Arbor Veterans Affairs and University of Michigan, 300 North Ingalls, Room 7C27, Campus Box 0429, Ann Arbor, MI 48109-0429.

Author Contributions: Conception and design: N.J. Farber, B.M. Aboff, J. Weiner, E.G. Boyer, P.A. Ubel.

Analysis and interpretation of the data: N.J. Farber, J. Weiner, E.B. Davis, E.G. Boyer, P.A. Ubel.

Drafting of the article: N.J. Farber.
Critical revision of the article for important intellectual content: N.J. Farber, J. Weiner, E.B. Davis, E.G. Boyer, P.A. Ubel.
Final approval of the article: N.J. Farber, B.M. Aboff, J. Weiner, E.B. Davis, E.G. Boyer, P.A. Ubel.
Provision of study materials or patients: N.J. Farber.
Obtaining of funding: N.J. Farber.
Collection and assembly of data: N.J. Farber.

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