The View of Religious Corporations toward Euthanasia and Extraordinary Treatments in Japan

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Running head: End-of-life issues and Japanese religion

Abstract

388 Japanese religious groups - 143 Shinto, 157 Buddhist, 58 Christian and 30 others - were asked to answer questions regarding several forms of euthanasia in hypothetical situations and what they considered to be extraordinary treatment during the dying process. Passive euthanasia and indirect euthanasia were accepted by around 70% of the respondents. Active euthanasia was favored by less than 20% of them. Christians were less supportive of euthanasia than practitioners of other religions. Shinto and Buddhist corporations advocated "being natural," when medical treatment became futile at the terminal stage. Religionists' views may deepen the discussion on end-of-life issues.

Key words: euthanasia, extraordinary treatment, religion, Buddhism, Shinto, Japan

Introduction

In Japan, the discussion on euthanasia has been open since the Tokai University and Keihoku Hospital euthanasia cases. The Tokai University Hospital case (1992) was the first euthanasia case where a physician was prosecuted and was convicted of the murder of a patient in Japan (1). Here, at the request of his family the physician gave a potassium chloride injection to a dying comatose patient with multiple myeloma. In the Keihoku Hospital case (1996), a physician gave a muscle relaxant to a dying comatose cancer patient without the request of the patient or his family (2). The physician first proclaimed that his act was active euthanasia. However, on facing fierce condemnation by nurses, colleagues and media as a murderer, he changed his claim to say that he only intended to reduce convulsions. He was questioned by police but finally was not prosecuted because the patient died before the amount of muscle relaxant reached the lethal dosage. During the discussion of these incidents, there was public pretence that euthanasia did not exist or that no one asked for euthanasia in Japan (2,3). On the other hand, according to the recent surveys, 40 to 70% of laypeople (4,5), 20% of nurses (6) and 15 to 30% of doctors (6,7) thought that euthanasia was permissible. During these discussions, the Japanese religious world has kept mostly, if not totally, silent.

Religion may influence medical practices, particularly the care of terminally ill patients. Catholicism, for example, views that extraordinary treatments may not be forced on patients against their wishes (8); Judaism believes that once treatment is initiated it may not be withdrawn (9). Although an affirmative attitude of Japanese Buddhism toward euthanasia is indicated in literature (10,11), there is no survey of how Japanese religions think of euthanasia, end-of-life issues, or, more broadly, the care of terminally ill patients. Therefore, the author conducted a questionnaire survey on the attitudes of Japanese religions toward end-of-life issues. This report describes the results regarding extraordinary treatments for a dying patient and several forms of euthanasia in hypothetical clinical situations.

Methods

Religious Organizations:

Although the number of believers is overestimated, current activities of Japanese religions are well surveyed by the Ministry of Education (12). Table 1 describes profiles of three principal religions, Shinto, Buddhism and Christianity, as well as those of additional religious groups in Japan.

Shinto is a mixture of Japanese indigenous belief in the soul, animism, Chinese religion and ideologies, and Buddhism (12). Shinto organizations can be divided into 3 denominations, Jinja (Shrine)-Shinto, Kyoha (Sectarian)-Shinto and Shinkyoha

(New-Sectarian)-Shinto (12). Jinja-Shinto is based on activities in Shinto shrines. The Kyoha-Shinto and Shinkyoha-Shinto schools consist of followers of specific Shinto organizers or founders. Japanese Buddhism is composed of several sects such as Tendai, Shingon, Zen, Jodo (Pure Land) and Nichiren. The first three sects were introduced from China into Japan in the 9th to 12th centuries, and the latter two sects were founded in Japan during the 12th and 13th centuries. Japanese Buddhism is characterized by the ideas that everyone has a potential to be Buddha (Tendai and Shingon), enlightenment can be achieved by the individual (Zen), or that Salvation comes through Faith (Jodo and Nichiren). Christianity, both Catholics and Protestants, are also active. There are other religious schools which do not belong to any of the three principal religions.

Questionnaire:

Because of the legal system, religious organizations are registered as corporations in Japan. When organizations' activities go beyond a prefectural boundary, they are unified as “inclusive corporations” and registered by the central government. Thus, “the Annals of Religion 1998” lists a total of 388 “inclusive religious corporations” (12), including 143 Shinto, 157 Buddhist, 58 Christian, and 30 miscellaneous religious groups registered by the Ministry of Education (Table 1).

In September 1998, a questionnaire was mailed to the 388 “inclusive religious corporations” asking them to answer questions regarding their religious faith and attitudes toward euthanasia and extraordinary treatment of the terminally ill. According to the report (12), these corporations comprise 80% in terms of number of the believers in Japan.

Hypothetical Euthanasia Cases:

Hypothetical clinical situations and questions are shown in Table 2. The forms of euthanasia in this article are categorized as 1) doctor-determined (active or passive), 2) patient-requested (voluntary, non-voluntary and involuntary) (13), and 3) indirect (14). Cases 1 to 3 concern terminal patients and Case 4 deals with non-terminal illness. The use of the word, “euthanasia,” was avoided as much as possible, since it might have prejudiced respondents against decision-making on the part of the doctor, although in Questions 7 and 9 the specific situation called on the use of the terms “euthanasia” and “mercy killing.” In each situation, a family's approval was considered, because it is usually a prerequisite for the doctor's decision in Japan. Respondents were asked whether they agreed with the doctor's decision or the act of euthanasia. An answer was chosen from one of the five items, “agree strongly,” “agree,” “neutral,” “disagree,” “disagree strongly.”

Extraordinary Treatments:

Questions about extraordinary treatment were raised on the assumption that any medical treatment would be futile or merely meant to prolong the dying process in a terminally ill patient. Then, questions were, 1) “Do you approve of the concept that there is no moral requirement to provide extraordinary treatment to terminal patients? (Denial of extraordinary treatments),” 2) “Do you agree with the idea that the family should make a decision and that the doctor should comply with the family's decision in such a case? (Family could decide),” 3) “Do you agree with the idea that artificial respiration is extraordinary? (Artificial respiration),” 4) “Do you agree with the idea that intravenous hyperalimentation is extraordinary? (Intravenous nutrition),” 5) “Do you agree with the idea that gastric tube feeding is extraordinary? (Tube feeding),” and 6) “Do you agree with the idea that fluid and electrolyte supplementation is extraordinary? (Fluid and electrolytes).” To each question, a brief commentary was added to make the meaning and procedures of the treatments understandable for respondents. The choice of answers is described above. Comments were encouraged.

Statistics:

Percentages were calculated based on the total respondents to each question. Results were tested by a chi square test at the 5% level of significance.

Results

Recovery of Questionnaire:

The questionnaire was returned by 73% of religious corporations (Table 3). A total of 43% of the corporations responded to questions. The actual persons who answered questionnaire included 139 leaders and 23 theologians of the corporations. 5 additional leaders specified that the answers represented their own views. “No unified policy,” “Do not answer questionnaires” and “Not functioning” were reasons given for those returning questionnaire without answering. Since “Not functioning” corporations were mainly of smaller size, these figures of 73 and 43% in fact represented 86 and 54% in terms of the number of believers in the inclusive corporations in Japan. If “No unified policy” was included, this survey would represent 55% of the inclusive religious corporations and 63% of the enrolled believers.

Answers to Hypothetical Euthanasia Cases:

To the voluntary passive euthanasia of Case 1, a total of 68% of the religious corporations answered “agree strongly” and “agree” (Table 4). The corresponding figure was 75%, if the family requested the procedure. There was no statistically significant difference among the four religious groups in their responses. When the results were examined in each religion, there was statistically significant

difference in the responses to non-voluntary passive euthanasia especially among the principal Buddhist corporations (chi square=23.40, P=0.024, df=12). Zen corporations were less favorable to the doctor's act than other Buddhist corporations. Among Christians, Protestant corporations were more favorable to the doctor's act than Catholics, although the difference was statistically marginal (chi square=7.42, P=0.059, df=3).

In Case 2, a total of 19% answered “agree strongly” and “agree” with voluntary active euthanasia (Table 4). The corresponding figures increased to 63% for indirect euthanasia. There was a significant difference in responses to active euthanasia among the four religious groups (chi square=21.59, P=0.042, df=12), which was due to a more favorable attitude of Shinto corporations than of other religions (chi square=14.31, P=0.006, df=4). Christian corporations were slightly less favorable than Buddhist corporations. All Catholic corporations disagreed or disagreed strongly with the doctor's act, whereas 60% of Protestant corporations disagreed or disagreed strongly (chi square=6.82, P=0.07, df=3).

In Case 3, a total of 12 to 16 % of the respondents agreed strongly and agreed with non-voluntary active euthanasia (Table 4). There were significant differences in these responses among the four religious groups (chi square=22.31, P=0.034, df=12 in the use of potassium chloride, and chi square=21.54, P=0.043, df=12 in the use of sedative). Shinto corporations were more favorable to non-voluntary active euthanasia with potassium chloride than other religions (chi square=14.30, P=0.006, df=4). Buddhist corporations showed a slightly favorable attitude toward the use of sedatives. Thus, the attitudes of Shinto and Buddhist corporations were more favorable to non-voluntary active euthanasia using a sedative than Christian and miscellaneous corporations (chi square=11.66, P=0.02, df=4). Christian corporations were less favorable than other religions toward both drugs. Furthermore, Catholic corporations were less favorable to the doctor's act than Protestant corporations (chi square=5.93, P=0.11, df=3 in the use of potassium chloride, and chi square=8.80, P=0.03, df=3 in the use of sedative).

In Case 4 with a quadriplegic patient, 14% of the respondents agreed with the doctor's decision of voluntary active euthanasia with a sedative (Table 5). The corresponding figure was 40%, when the doctor accepted voluntary passive euthanasia. Response to mercy killing was similar to voluntary active euthanasia. There was no significant difference in overall responses among the four religious groups, but Christian and miscellaneous religious corporations were less favorable to active euthanasia and mercy killing than Shinto and Buddhist corporations (chi square=12.89, P=0.004, df=3 for active euthanasia, and chi square=10.49, P=0.03, df=4 for mercy killing). When the results were examined in each religion, the Kyoha-Shinto corporations were less favorable to active euthanasia than the Shinkyoha-Shinto corporations (chi square=7.63, P=0.054, df=3). Catholics were less favorable to

mercy killing than Protestant corporations (chi square=11.22, P=0.01, df=3).

Extraordinary Treatments:

The Catholic policy regarding extraordinary treatment (8) was approved of by 71 and 85% of Shinto and Buddhist corporations, respectively (Table 6). Although there was no significant difference in the results among the four religious groups, Shinto corporations were less affirmative to this Catholic view compared with the other three religious groups (chi square=11.21, P=0.02, df=4). The Vatican's view in favor of family decision in such a situation (8) was affirmed by 48% of Japanese Catholic corporations. This policy was approved of by 37% and 45% of Shinto and Buddhist corporations, respectively.

Answers to “Artificial respiration,” “Intravenous nutrition” and “Tube feeding” showed almost the same tendency, that is 38% to 42% of Shinto, 41% to 45% of Buddhist and 39% to 42% of Christian corporations considered these treatments extraordinary. "Fluid and electrolytes" was considered to be extraordinary by 40% of Shinto corporations, whereas 26% each of Buddhist and Christian corporations considered it so. The number of Buddhist corporations who did not consider “Fluid and electrolytes” extraordinary was less than in the other three religious groups (chi square=13.79, P=0.008, df=4). The attitudes of Catholic corporations split; 50% of the Catholic corporations considered “Fluid and electrolyte” extraordinary, but the other half did not. And the difference between Catholic and Protestant corporations was statistically significant (chi square=12.43, P=0.006, df=3).

Remarks:

Among the respondents, 41 Shinto, 40 Buddhist, 21 Christian, and 7 miscellaneous religious corporations made comments in their responses. Nearly all Shinto corporations advocated “being natural” because of their religious faith in the immortality of the soul. Some noted that euthanasia can be natural. Medicine is a gift of the gods, however, prolongation of life using artificial means is a disgraceful act against life. Others noted that the patient should rely on the doctor or medicine, and suggested that Shinto would accept any approach regardless of the cause or intention.

In Buddhism, many corporations noted that medical treatment is necessary to cure disease whereas mere prolongation of life. One Zen corporation noted that the patient can make his or her own decision. One Nichiren corporation regretted the ignorant attitude of Japanese Buddhism toward the end-of-life issues, noting that sanctity of life is understandable, but that spiritual satisfaction is more important for the deceased and bereaved.

The Catholic Central Committee expressed the principle of Catholicism toward terminal care authorized by the Vatican (8). Nearly all notes from Christian

corporations expressed objection against active euthanasia and futile treatment, while respecting the decisions of the patient. The necessity of advance directives was also mentioned. Remarks of the miscellaneous corporations were not significantly different from those of the other groups.

Discussion

Clinical practices involving ethical problems differ among countries with different traditions and culture. This may be particularly true of the end-of-life issues, including euthanasia. For example, physician-assisted suicide has never been mentioned during the discussion of euthanasia in Japan (15), a fact which is in contrast to some Western countries (16,17,18). The Japan Medical Association published a report by its Bioethics Council saying that "there is no way other than the allowance of euthanasia in very exceptional occasions as it is practiced currently" (19). There are two court rulings which have permitted active euthanasia in Japan (20). Regarding passive euthanasia and indirect euthanasia, the Japanese Academy of Science and Art has approved of these practices (21), whereas passive euthanasia is always condemned by the Japanese media as having "killed" patients (22,23). Thus, there appear to be two extreme opinions regarding the discussion on euthanasia: allowance of active euthanasia on the one hand, and denial of passive euthanasia on the other; the two sides do not communicate with each other. A consequence of these phenomena in end-of-life issues is the prevailing practice of "prolongation of the dying process" in contemporary Japan (24,25).

Japanese traditional and contemporary views of life and death derive mainly from Shinto and Japanese Buddhism. The typical features of Shinto are love of cleanliness and belief in the immortality of the soul and ancestor worship (12,26). According to this traditional thinking, death is a separation of the soul and body. And the soul can be deified regardless of whether death resulted from euthanasia or suicide, when the dying process is natural, brave, virtuous or meaningful. Thus, the dying process is important in Shinto.

The core of Buddhist philosophy regarding life and death is metempsychosis or transmigration of the soul (i.e., suffering) until nirvana or full comprehension (i.e., release from metempsychosis) is achieved (10,27). Therefore, euthanasia or suicide is by no means a solution to suffering in original Buddhism (10,11,27). It may be that the Buddhist philosophy of metempsychosis and nirvana and the Shinto ideology regarding the soul have been influenced each other. For example, metempsychosis is not always a form of suffering in Japanese Buddhism. The corpse is mere existence without importance in original Buddhism, whereas Japanese Buddhism teaches that the corpse must be left untouched for a while before it is prepared for the funeral (28); Shinto teaching is the same. Euthanasia and suicide are not continuations of

suffering but ways to the Pure Land (heaven) from this Defiled World (10). Shinto and Buddhist approaches to life and death are different from the Christian approach, although “sanctity of life” is shared by these religions in a superficial sense (11).

This study was probably the first survey to have covered the whole religious world in Japan. Even the controversial issue of brain death has not led to a survey Japanese religions as a whole (29). As noted, the recovery rate of the questionnaire was 73%, and the survey covered 54% in terms of number of believers. Thus, the present results represent the attitudes of Japanese religions based on their religious faith. One may question the validity of an analytical study of this sort, since doctrine or theology usually suffices to answer questions regarding religious issues. But, diverse opinions were anticipated from Shinto and Japanese Buddhism. In addition, it has been pointed out that the discussions of theologians are sometimes oversimplified or even incorrect (11,30). Therefore, such a survey is able to attain deeper understanding and to add more insight in regard to the issues concerned. Regarding the validity of this study, there is no data to compare with the present results. However, the disciplined answers by Japanese Catholics based on Catholic doctrine (8,31) indicate reliability.

The results of the study show that a majority of the religious corporations are favorable to passive euthanasia and indirect euthanasia at the terminal stage. These results were similar to those among secular people in Japan (15). Religionists and secular people consistently favor non-voluntary passive euthanasia over voluntary passive euthanasia. Thus, the Japanese prefer non-voluntary to voluntary euthanasia and value the family's request at the terminal stage. The less favorable attitude of Zen corporations among the Buddhist corporations toward non-voluntary act may stem from their religious belief in enlightenment by the individual's own will. But in general, the concept of “being natural” in both Shinto and Buddhist teaching may be contributory to the less favorable attitude toward the voluntary act.

Active euthanasia was greeted unfavorably among the religionists in general, as it was among secular people (15). Nevertheless, Shinto corporations were more favorable to active euthanasia than were the Buddhist and Christian corporations. Such a trend in Shinto is understandable because of religious beliefs described earlier. The Japanese tradition in favor of active euthanasia may be also contributory to the present results (32). The Japanese tradition of mercy killing (10,11) may be the reason for favorable attitudes of Shinto and Buddhist corporations toward this act as compared with the attitudes of Christians. In these results, religious corporations did not distinguish potassium chloride versus sedative and voluntary versus non-voluntary active euthanasia, whereas secular people favored the use of sedatives and the voluntary act compared with potassium chloride and the non-voluntary act (15). Mercy killing was considered the same as active euthanasia among religious corporations, which was not the case among secular people (15,20). The religionists’

attitudes may be derived from religious belief; Shinto, for example, noted that they would accept any consequence regardless of its nature or motivation. Such different approaches between the religious and secular worlds may have significant implications in the decision-making in connection with end-of-life issues.

The Catholic view of denial of extraordinary treatment in the dying process (8) was approved of by the majority of Shinto and Buddhist corporations. The reason for the denial of the Catholic doctrine by some Shinto and Buddhist corporations is likely to be due to their religious faith in leaving medical decision-making to the doctor and the family. This tendency is particularly strong in Shinto; hence Shinto corporations tend to accept each extraordinary treatment slightly more frequently than Christian and Buddhist corporations. The Buddhist teaching of "being natural" may be contributory to Buddhism's tendency to deny futile treatments at the terminal setting. Whatever the origin of the concept, "denial of extraordinary treatment" in Catholicism (31,33) or "being natural" in Shinto and Buddhism, consequences were the general reason for the rejection of futile treatments among Japanese religionists. On the other hand, the difficulty in defining futile treatments is illustrated in the attitude of Christian corporations toward fluid and electrolyte supplementation. Christian corporations, in contrast to Buddhist corporations, tended to think that fluid and electrolyte supplementation is not extraordinary. Furthermore, Catholics split regarding this matter, presumably because the matter of fluid and electrolyte supplementation is an on-going issue among Christian organizations (31,33). The present results may be helpful for deepening the discussion regarding futile treatment, particularly because what treatments are meant to be extraordinary in terminal medicine is left mostly to the first-line decision (8,21).

Japanese people are said to be skeptical of religion, and only 33% of people questioned answered that religion was important for human life (34). The number of people who believed in a religion was 32% (26% for Buddhism, 2% for Shinto, 1% for Christianity), and 63% answered as atheists (34). However, among the so-called atheists, 70% and 46% believed in Buddhist cause/effect thinking and the immortality of the soul, respectively. And 79% and 57% of these atheists visited the family grave and went to a shrine and temple for the New Year's celebration. Thus, religion has considerable impact on Japanese people, albeit unconsciously. Religion alone cannot deal with death and dying, nor can medicine alone. Religion and medicine are distinct, but both devote themselves to caring for patients (35). Although the Japanese religious world has been mostly isolated from the rest of society, the variety of religious opinions are likely to help people to think by themselves about these important end-of-life issues in medicine. Open discussion involving religionists and secular people is essential to expand and to deepen understanding of these complex controversial issues.

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Reference

1. Tanida N. "'Bioethics' is Subordinate to Morality in Japan." *Bioethics*, 10:201-211, 1996.
2. Hatake K, Miura Y. "Euthanasia, Physician-Assisted Suicide, and Persistent Vegetative State." *Lancet*, 348:548-549, 1996.
3. Tanida N. "Public Pretences about Euthanasia in Japan." *Lancet*, 348:1103, 1996.
4. "Euthanasia, 67% Permitted." *Mainichi-Shinbun*, October 2, 1996. (in Japanese)
5. Tanida N. "The Social Acceptance of Euthanasia Does Not Stem from Patient's Autonomy in Japan." *Eubios J Asian Int Bioethics*, 7:43-46, 1997.
6. Takeo K, Satoh K, Minamisawa H, Mitoh T. "Health Workers' Attitudes toward Euthanasia in Japan." *Int Nurs Rev*, 38:45-48, 1991.
7. "15% of Doctors Do Not Care about 4 Conditions of Euthanasia." *Mainichi-Shinbun*, July 2, 1996. (in Japanese)
8. Gillon R. "Ordinary and Extraordinary Means." *BMJ*, 292:259-261, 1986.
9. Schostak RZ. "Jewish Ethical Guidelines for Resuscitation and Artificial Nutrition and Hydration of the Dying Elderly. *J Med Ethics*, 20:93-100, 1994.
10. Becker CB. "Buddhist Views of Suicide and Euthanasia." *Philosophy East West* 40:543-556, 1990.
11. Perrett RW. "Buddhism, Euthanasia and the Sanctity of Life." *J Med Ethics* 22:309-313, 1996.
12. The Agency for Cultural Affairs. *The Annals of Religion 1998*. Tokyo: Gyosei, 1998. (in Japanese).
13. Kantor JE. *Medical Ethics for Physician-in-Training*. New York: Plenum Publ Corp, 1989.
14. Emanuel EJ. "Euthanasia. Historical, Ethical, and Empiric Perspectives." *Arch Intern Med*, 154:1890-1901, 1994.
15. Tanida N. "Japanese Attitudes toward Euthanasia in Hypothetical Clinical Situations." *Eubios J Asian Int Bioethics*, 8:138-141, 1998.
16. Van der Maas PJ, van der Wal G, Haverkate I, de Graaff CLM, Kester JGC, Onwuteaka-Philipsen BD, et al. "Euthanasia, Physician-Assisted Suicide, and

Other Medical Practices Involving the End of Life in the Netherlands, 1990-1995." *N Engl J Med*, 335:1699-1705, 1996.

17. Burt RA. "The Supreme Court Speaks. Not Assisted Suicide but a Constitutional Right to Palliative Care." *N Engl J Med*, 337:1234-1236, 1997.
18. Meier DE, Emmons CA, Wallenstein S, Quill T, Morrison RS, Cassel CK. "A National Survey of Physician-Assisted Suicide and Euthanasia in the United States." *N Engl J Med*, 338:1193-1201, 1998.
19. The Bioethics Council of the Japanese Medical Association. "A Report on How Doctors Should Behave in Terminal Care." *Nihon Ishikai Zasshi*, 107:1209-1217, 1992. (in Japanese)
20. Hoshino K. "Euthanasia: Current Problems in Japan." *Camb Q Healthc Ethics*, 2:45-47, 1993.
21. "Dying and Medicine" ad hoc Committee of Japanese Academy of Science and Art. Report on "Death-with-Dignity." *Jurisuto*, (N0.1061):70-73, 1995. (in Japanese)
22. "Euthanasia by Stopping Artificial Feeding." *Mainichi-Shinbun*, Jan 6, 1997. (in Japanese)
23. "An Old Person Was Killed by Not Treating Pneumonia." *Mainichi-Shinbun*, Jan 10, 1997. (in Japanese)
24. "Death-with-Dignity Can be Allowed in Terminal Cancer." *Mainichi-Shinbun*, May 7, 1997. (in Japanese)
25. "Terminal Care for Neonates." *Mainichi-Shinbun*, February 1, evening edition, 1999. (in Japanese)
26. Ono S. *Shinto: the Kami Way*. Tokyo: Charles E. Tuttle Co, 1997
27. Lecso PA. "Euthanasia: a Buddhist Perspective." *J Relig Health*, 25:51-57, 1986.
28. Kuge N, Ito S, Fujimoto K, Arase S. "How to Behave on Facing Death in Japanese Buddhist History." Mizutani K ed, In *Buddhism and Terminal Care*. Kyoto: Hozokan, 27-54, 1996. (in Japanese).
29. Hardacre H. "Response of Buddhism and Shinto to the Issue of Brain Death and Organ Transplant." *Camb Q Healthc Ethics*, 3:585-601, 1994.
30. Florida RE. "Buddhist Approaches to Euthanasia." *Stud Relig/Sci Relig*, 22:35-47, 1993.
31. Nairn TA. "Reclaiming Our Moral Tradition. Catholic Teaching Calls Us to Accept the Limits of Medical Technology." *Health Prog*, 78:36-39, 42, 1997.
32. Gorai S. *Japanese View on Death*. Tokyo: Kadokawa-Shoten, 1994. (in Japanese)
33. National Conference of Catholic Bishops Committee for Pro-life Activities. "Nutrition and Hydration: Moral and Pastoral Reflections." *J Contemp Health Law Policy*, 15:455-477, 1999.
34. "Atheists Increased among the Elderly and Critical Views toward Religious Organizations." *Asahi-Shinbun*, Sept 23, 1995. (in Japanese)

35. O'Donnell TJ. “Medicine and Religion. An Overview.” JAMA, 211:815-817, 1970.

Table 1. Numbers of Organizations, Teachers and Believers Covered by the 388 Inclusive Religious Corporations Registered by the Minister of Education in Japan December 31, 1997

Religion	Organizations	Teachers	Believers
Shinto (143)	86,785	65,484(5)	95,953,951
Jinja-Shinto (16)	80,249	26,975	91,674,061
Kyoha-Shinto (80)	5,687	35,020(5)	3,724,877
Shinkyoha-Shinto (47)	849	3,489	555,013
Buddhism (157)	84,336	216,919(38)	61,996,616
Tendai (20)	5,033	18,225(1)	2,659,958
Shingon (46)	14,987	61,664(25)	12,987,266
Jodo (23)	30,274	62,303(7)	19,571,212
Zen (22)	21,033	22,421(2)	3,270,740
Nichiren (38)	12,652	50,864(3)	23,306,275
Others (8)	357	1,442	210,165
Christianity (58)	7,751	10,641(2,103)	916,011
Catholic (14)	2,045	1,825(816)	455,557
Protestants (44)	5,706	8,816(1,287)	460,454
Miscellaneous (30)	41,163	262,658(7)	6,874,650
Total (388)	220,035	555,702(2,153)	165,741,228
Total figures*	227,558	649,937(7,241)	207,758,774

Organizations include shrines, temples and churches for propagation, most of which are qualified as individual juridical persons. Teachers include priests, monks, and missionaries. Figures in parentheses immediately after religious group names are numbers of inclusive corporations in each religion. Figures in parentheses of the teachers are foreigners. *Total figures derived from all religious organizations in addition to the inclusive corporations in Japan.

Table 2. Hypothetical Clinical Situations and Questions

Case 1: An elderly patient is bed-ridden in a nursing home because of disability. He has suffered from repeated pneumonia, and he has caught pneumonia again. The administration of antibiotics is considered to be effective to some extent.

The patient has asked the doctor not to use antibiotics, because he wants to die quietly. The doctor has accepted his wish. (Question 1)

The patient has fallen into unconsciousness without revealing his wishes. The Family has asked the doctor not to use antibiotics. The doctor has accepted the family's wish. (Question 2)

Case 2: A patient with end-stage cancer suffers from severe pain and fatigue despite every measure. Her death is estimated to be near. She has repeatedly asked the attending doctor for peaceful death using drugs. Her family approves of the patient's wish.

The doctor administers potassium chloride and the patient dies. (Question 3)

The doctor administers a sedative to keep the patient unconscious till death. (Question 4)

Case 3: A patient has fallen into an irreversible coma without revealing his wishes. His death is inevitable and near because of his disease. Knowing the situation, the family has repeatedly asked the attending doctor to hasten death, using drugs.

The doctor administers potassium chloride and the patient dies. (Question 5)

The doctor administers a sedative, and the patient dies. (Question 6)

Case 4: A young patient has been a quadriplegic for 6 years. He has suffered from pneumonia repeatedly. He does not look like the superb athlete he used to be. At present the patient's condition is stable. He has been fed on nasogastric tube nutrition. He is not depressive according to psychiatrists.

He has repeatedly requested euthanasia to the doctor, suggesting a high dose of sedative.

The doctor accepts his wish. (Question 7)

The patient has repeatedly asked the doctor to withdraw tube feeding. He has rejected water and electrolyte infusion as well. The doctor accepts his wish. (Question 8)

He has fallen into unconsciousness because of severe pneumonia without expressing his wishes. The family has asked the doctor for euthanasia. The doctor performs a mercy killing with a high dose of sedative. (Question 9)

Table 3. Recovery Rates of Questionnaire and Profiles of Responses from the 388 Inclusive Religious Corporations

Religion / Sect	Total religious corporations	Recovered number	Responding number	Reasons for no answer: No unified policy	Reasons for no answer: Do not answer	Reasons for no answer: Not functioning
Shinto	143	104(73)	53(37)	13(9)	16(11)	22(15)
Jinja-Shinto	16	9(56)	3(19)	3(19)	1(6)	2(13)
Kyoha-Shinto	80	60(75)	32(40)	7(9)	8(10)	13(16)
Shinkyoha-Shinto	47	35(74)	18(38)	3(6)	7(15)	7(15)
Buddhism	157	108(69)	66(42)	22(14)	7(4)	13(8)
Tendai	20	14(70)	9(45)	3(15)	0	2(10)
Shingon	46	32(70)	19(41)	5(11)	2(4)	6(13)
Jodo	23	17(74)	11(48)	3(13)	0	3(13)
Zen	22	18(82)	12(55)	3(14)	1(5)	2(9)
Nichiren	38	21(55)	13(34)	6(16)	2(5)	0
Others	8	6(75)	2(25)	2(25)	2(25)	0
Christianity	58	47(81)	33(57)	4(7)	6(10)	4(7)
Catholic	14	12(86)	8(57)	0	3(21)	1(7)
Protestants	44	35(80)	25(57)	4(9)	3(7)	3(7)
Miscellaneous	30	25(83)	15(50)	7(23)	3(10)	0
Total	388	284(73)	167(43)	46(12)	32(8)	39(10)

Figures are numbers of inclusive juridical persons and percentages of each sector in parentheses.

Table 4. Attitudes of Japanese Religious Corporations towards Hypothetical Euthanasia Cases at the Terminal Stage.

Religion	Case 1: end-stage pneumonia		Case 2: a conscious cancer patient		Case 3: an unconscious cancer patient	
Sects	Voluntary passive euthanasia	Non-voluntary passive euthanasia	Voluntary active euthanasia	Indirect euthanasia	Non-voluntary active euthanasia(KCl)	Non-voluntary active euthanasia(sedative)
Shinto	3/31/8/10/1	3/34/12/4/0	2/15/16/18/2	3/33/11/5/1	0/11/15/21/5	0/12/18/16/6
Jinja-Shinto	0/2/0/1/0/	0/1/1/1/0	0/0/1/2/0	0/2/1/0/0	0/0/0/3/0	0/0/0/3/0
Kyoha-Shinto	1/17/6/7/1/	0/21/9/2/0	2/10/8/12/0	1/19/8/3/1	0/7/11/11/3	0/8/11/10/3
ShinKyoha-Shinto	2/12/2/2/0/	3/12/2/1/0	0/5/7/4/2	2/12/2/2/0	0/4/4/7/2	0/4/7/3/3
Buddhism	5/37/14/6/0	5/44/10/3/0	1/10/15/24/10	4/35/18/5/0	2/4/17/28/10	0/10/21/23/7
Tendai	1/6/1/0/0/	1/7/0/0/0	0/3/0/4/1	0/7/1/0/0	0/2/1/4/1	0/1/5/2/0
Shingon	2/10/3/4/0	2/15/2/0/0	0/2/5/5/6	1/12/4/2/0	0/1/4/9/5	0/3/3/10/3
Jodo	1/7/3/0/0	1/8/2/0/0	0/3/1/5/2	1/4/3/3/0	0/0/4/4/3	0/2/3/3/3
Zen	0/7/4/1/0	0/4/5/3/0	0/0/5/7/0	1/7/4/0/0	1/0/5/6/0	0/2/5/5/0
Nichiren	1/6/3/1/0	1/9/1/0/0	1/2/3/3/1	1/4/6/0/0	1/1/2/5/1	0/2/4/3/1
Others	0/1/0/0/0	0/1/0/0/0	0/0/1/0/0	0/1/0/0/0	0/0/1/0/0	0/0/1/0/0
Christianity	2/21/6/2/2	1/23/6/2/0	0/1/9/13/10	2/20/5/6/0	0/1/5/17/10	0/3/6/18/6
Catholic	1/4/1/1/1	1/3/3/1/0	0/0/0/3/5	1/4/1/2/0	0/0/0/3/5	0/0/0/4/4
Protestants	1/17/5/1/1	0/20/3/1/0	0/1/9/10/5	1/16/4/4/0	0/1/5/14/5	0/3/6/14/2
Miscellaneous	1/10/1/2/0	1/10/2/1/0	1/1/3/5/3	1/4/4/3/1	1/0/4/5/3	1/0/4/6/3
Total	11/99/29/20/3	10/111/30/10/0	4/27/43/60/25	10/92/38/19/2	3/16/41/71/28	1/25/49/63/22
p value*	0.582	0.985	0.042	0.337	0.034	0.043

Figures designate number of religious corporations by “agree strongly”/”agree”/”neutral”/”disagree”/”disagree strongly.”

*p values are results of chi-square test among the three principal religions and miscellaneous religious groups.

Table 5. Attitudes of Japanese Religious Corporations towards Hypothetical Euthanasia in a Quadriplegic Patient

Religion Sects	Voluntary active euthanasia	Voluntary passive euthanasia	Mercy killing
Shinto	0/10/18/18/7	1/20/20/11/1	0/13/17/18/4
Jinja-Shinto	0/0/2/1/0	0/1/1/1/0	0/0/0/3/0
Kyoha-Shinto	0/4/9/15/4	0/11/12/8/1	0/6/12/11/2
Shinkyoha-Shinto	0/6/7/2/3	1/8/7/2/0	0/7/5/4/2
Buddhism	0/10/19/27/5	0/26/18/15/2	1/9/19/26/6
Tendai	0/1/3/4/0	0/3/4/1/0	0/2/4/2/0
Shingon	0/3/5/9/2	0/6/5/7/1	0/4/4/9/2
Jodo	0/2/2/5/2	0/5/1/4/1	0/1/2/5/3
Zen	0/2/5/5/0	0/5/5/2/0	0/0/5/7/0
Nichiren	0/2/3/4/1	0/7/2/1/0	1/2/3/3/1
Others	0/0/1/0/0	0/0/1/0/0	0/0/1/0/0
Christianity	0/1/5/19/8	0/14/7/10/2	0/3/5/20/5
Catholic	0/0/0/4/4	0/6/0/1/1	0/0/0/4/4
Protestants	0/1/5/15/4	0/8/7/9/1	0/3/5/16/1
Miscellaneous	0/1/3/7/3	0/3/5/4/2	0/0/4/7/3
Total	0/22/45/71/23	1/63/50/40/7	1/25/45/71/18
P value*	0.098	0.569	0.197

Figures designate number of religious corporations by “agree strongly”/”agree”/”neutral”/”disagree”/”disagree strongly.”

*P values are results of chi-square test among the principal three religions and miscellaneous religious groups.

Table 6. Attitudes of Japanese Religious Corporations towards Extraordinary Treatments in the Terminal Setting.

Religion Sects	Denial of extraordinary treatment	Family could decide	Are these treatment extraordinary? Artificial respiration	Intravenous nutrition	Tube feeding	Fluid and electrolytes
Shinto	10/26/6/8/1	2/16/19/12/0	2/18/21/12/0	1/19/18/13/1	1/21/17/13/1	1/20/18/13/1
Jinja-Shinto	0/2/0/1/0	0/1/2/0/0	0/1/1/1/0	0/1/1/1/0	0/2/0/1/0	0/1/1/1/0
Kyoha-Shinto	5/15/4/5/1	0/9/12/8/0	0/11/14/7/0	0/11/12/8/0	0/12/12/8/0	0/9/12/11/0
Shinkyoha-Shinto	5/9/2/2/0	2/6/5/4/0	2/6/6/4/0	1/7/5/4/1	1/7/5/4/1	1/10/5/1/1
Buddhism	14/40/6/3/1	5/24/27/8/0	2/25/30/8/1	2/26/29/9/0	2/27/25/11/0	1/16/40/8/0
Tendai	1/5/1/2/0	1/3/4/1/0	0/5/3/0/1	0/5/3/1/0	0/4/5/0/0	0/4/5/0/0
Shingon	4/13/1/0/1	1/9/5/3/0	0/5/10/4/0	0/5/9/5/0	0/6/7/6/0	0/2/13/4/0
Jodo	4/5/1/0/0	1/1/5/3/0	1/5/4/1/0	1/5/3/2/0	1/5/2/3/0	1/3/6/1/0
Zen	2/6/3/0/0	0/5/6/1/0	0/5/7/0/0	0/6/6/0/0	0/6/5/1/0	0/3/7/1/0
Nichiren	3/10/0/0/0	2/5/6/0/0	1/5/4/3/0	1/5/6/1/0	1/5/5/1/0	0/4/7/2/0
Others	0/1/0/1/0	0/1/1/0/0	0/0/2/0/0	0/0/2/0/0	0/1/1/0/0	0/0/2/0/0
Christianity	6/24/2/0/0	1/13/14/1/0	2/10/13/6/0	1/11/13/6/0	0/13/12/6/0	0/8/12/9/2
Catholic	4/4/0/0/0	1/4/3/0/0	1/4/2/1/0	0/4/3/1/0	0/4/3/1/0	0/4/0/2/2
Protestants	2/20/2/0/0	0/9/11/1/0	1/6/11/5/0	1/7/10/5/0	0/9/9/5/0	0/4/12/7/0
Miscellaneous	2/12/0/0/1	0/4/5/3/1	0/4/6/3/1	0/5/5/4/1	0/6/4/3/1	0/5/4/4/1
Total	32/102/14/11/3	8/57/65/24/1	6/57/70/29/2	4/61/65/32/2	3/67/58/33/2	2/49/74/34/4
P value*	0.14	0.34	0.69	0.70	0.76	0.11

Figures designate number of religious corporations by “agree strongly”/”agree”/”neutral”/”disagree”/”disagree strongly.”

*P values are results of chi-square test among the three principal religions and miscellaneous religious groups.