

## Issues concerning life-prolonging treatment in Japan, as considered from attitudes among the legal and medical professions

Yoshihiko Iijima

*Medical Research and Clinical Promotion Office, Nagoya University Hospital, Nagoya, Japan*

### ABSTRACT

In this paper, the author explores the clinical ethical issue of the withdrawal and withholding of life-prolonging treatment, surveying 2,848 lawyers and 2,469 doctors as medical and legal professionals in Japan on a variety of points for discussion. The main survey items are: (1) systems that should be used in the withdrawal and withholding of life-prolonging treatment at the end of life; (2) problems in determining treatment strategy at the end of life; (3) assessment of suspension of life support systems (extubation); and (4) strategies for better end-of-life care. While 42.2% of lawyers cited legislature and judiciary and 54.9% cited academic society guidelines as the system that should respond to the withdrawal and withholding of life-prolonging treatment, 23.3% of doctors cited the legislature and the judiciary, and 65.4% academic society guidelines. In relation to current end-of-life care, 81.3% of lawyers and 69.3% of doctors responded that there was room for improvement. Strategies for doing so included ensuring the transparency of and publishing decision procedures, and notification to government. It is important for medical institutions to normalize end-of-life care by making decisions with reference to guidelines and the like, ensuring the transparency of decision-making procedures, and being managed by a public institution.

Keywords: profession, end-of-life care, clinical ethics, withdrawing and withholding of life-prolonging treatment

#### Abbreviations:

HEC: hospital ethics committee

CEC: clinical ethical consultation

This is an Open Access article distributed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view the details of this license, please visit (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

### INTRODUCTION

In medical settings, doctors regularly agonize over how to deal with problems from an ethical perspective (known as clinical ethical issues), such as a refusal to accept blood transfusions for religious reasons and the withdrawal of life-prolonging treatment at the end of life.

---

Received: January 26, 2021; accepted: June 28 2021

Corresponding Author: Yoshihiko Iijima, MD, JD, PhD

Department of Bioethics, Faculty of Medicine, Fujita Health University, 1-98 Dengakugakubo, Kutsukake-cho, Toyoake 470-1192, Japan

Tel: +81-562-93-9938, E-mail: [yoshihiko.iijima@fujita-hu.ac.jp](mailto:yoshihiko.iijima@fujita-hu.ac.jp)

In the real world, these clinical ethical issues involve significant opposition on moral and religious grounds. Obtaining social agreement and securing agreement between the interested parties is difficult. When doctors deal with these issues, decisions must be made on the basis of systemic issues, such as legal decisions or ethics committee guidelines, rather than the decisions being made only by medical experts. Moreover, precedents such as the Ōno Hospital case,<sup>1</sup> in which the treating doctors and other medical staff were arrested, are found throughout Japan. Doctors do not want to bear the legal liability for death or a worsening of symptoms when they treat their patients in good faith.

Japan is hesitant to legislate in relation to clinical ethical issues, and the justice system is reluctant to become involved in medical settings. The withdrawing and withholding of life-prolonging treatment at the end of life, which is a clinical ethical issue, results in a patient's death due to the actions of medical staff. Therefore, it is a serious issue for doctors. In end-of-life care, where the public norm of pre-determination by legislation or the judiciary is not functioning sufficiently, guidelines formulated by academic societies (administrative guidelines), guidelines formulated by academic societies (academic society guidelines), ethics committees, or other clinical legal support are expected to fill this "gap in the law."<sup>2</sup>

When considering clinical ethical issues, legal compliance and the ethical principles involved must be taken into consideration as well as adopting a purely medical perspective. In this regard, medical professionals (doctors) and legal practitioners (lawyers) must cooperate. However, in the present circumstances, the two groups do not seem to be actively cooperating on the ground (at the practitioner level).

In 2017, the author surveyed doctors and lawyers in various medical settings in Japan to examine the current situation, problems with clinical ethical support, and the refusal of blood transfusions due to religious beliefs, and published the results.<sup>3</sup> The present survey further investigates matters pertaining to the withdrawing and withholding of life-prolonging treatment and therefore represents a continuation of the previous work.

## MATERIALS AND METHODS

### *Survey subjects and methods*

The survey was carried out on 2,484 lawyers who were members of bar associations in the Tōkai region (Aichi, Mie, Gifu, and Shizuoka), and 2,469 doctors, consisting of 978 chairs of hospital ethics committees (HEC) or those in charge of medical safety departments at clinical training designated hospitals<sup>4</sup> throughout Japan, 332 directors of hospitals with 200 beds or fewer (excluding psychiatric hospitals) in the Tōkai region (Aichi, Mie, Gifu, and Shizuoka), and 1,159 directors of geriatric health services facilities, which provide advanced care for elderly people ("elderly care doctors").

The survey was conducted from March to August 2017 by posting questionnaires directly to Aichi Bar Association lawyers through the Aichi Bar Association Hall mailbox after obtaining permission from the Bar Association president, and by sending questionnaires to other lawyers and doctors by post. A response to the survey was deemed as signifying consent to participate in the study.

This study was conducted according to the ethical guidelines for medical and health research involving human subjects. The ethical clearance was provided by the Ethical Review Committee of Nagoya University of Medicine. A participant's return of a completed questionnaire was regarded as consent to participate in this study. To ensure privacy and confidentiality, the questionnaires were anonymous and self-administered.

*Response rate*

Responses were received from 268 lawyers (response rate: 10.8%), 379 doctors from clinical training designated hospitals (response rate: 38.8%), 113 directors of small-scale hospitals (response rate: 34.0%), and 320 elderly care doctors (response rate: 27.6%). In total, 1,080 of the 4,953 subjects (21.8%) responded. (Table 1)

**Table 1** The number of questionnaires sent and the response rate

Occupation		Questionnaires sent	Responses (rate)
Lawyers	Lawyers (Aichi, Mie, Gifu, and Shizuoka Bar Associations)	2484	268 (10.8)
	Clinical training designation hospitals Those in charge of clinical ethical issues	978	379 (38.8)
Doctors	Directors of small-scale hospitals (200 beds or less) (Aichi, Mie, Gifu, and Shizuoka)	332	113 (34.0)
	Elderly care facilities (All Japan) (extended care facilities providing advanced care for elderly people)	1159	320 (27.6)
	Total	4953	1080 (21.8)

*Statistical analysis*

TAIKO version 5.0 (ESUMI-Japan, Tokyo, Japan) was used to analyze the results of this study. A hypothesis test for difference in two population proportions was calculated in statistical comparisons of the proportions of the response rate between lawyers and doctors.

RESULTS

*Systems to be used when withdrawing and withholding life-prolonging treatment at the end of life*

Among lawyers (N=268), 113 (42.2%) responded that this should be handled by “legislature/judiciary,” 29 (10.8%) suggested “administrative guidelines,” 147 (54.9%) suggested “academic society guidelines,” 104 (38.8%) suggested “HEC,” and 73 (27.2%) suggested “clinical ethical consultation (CEC).” Among doctors (N=811), 189 (23.3%) responded that it should be handled by “legislature/judiciary,” 154 (19.0%) suggested “administrative guidelines,” 530 (65.4%) suggested “academic society guidelines,” 411 (50.7%) suggested “HEC,” and 262 (32.3%) suggested “CEC.” The results show a statistically significant difference ( $p < 0.05$ ) in the ratio between “legislature/judiciary,” “administrative guidelines,” “academic society guidelines,” and “HEC,” among lawyers and doctors. (Table 2)

**Table 2** Systems to be used in making decisions regarding end-of-life care

Occupation	Number of responses (rate)	Legislature /judiciary	Administrative guidance	Academic society guidelines	HEC	CEC	Other
Lawyers	268 (100)	113 (42.2)*	29 (10.8)*	147 (54.9)*	104 (38.8)*	73 (27.2)	10 (3.7)
Doctors	811 (100)	189 (23.3)*	154 (19.0)*	530 (65.4)*	411 (50.7)*	262 (32.3)	59 (7.3)
Total	1079 (100)	302 (28.0)	183 (17.0)	677 (62.7)	515 (47.7)	335 (31.0)	69 (6.4)

\*Significant differences were observed between lawyers and doctors ( $p < 0.05$ ).

HEC: hospital ethics committee

CEC: clinical ethical consultation

*Problems in determining treatment strategy at the end of life: whether there are problems pertaining to determining treatment strategy for caregiving or acute period treatment*

In relation to whether they were able to respect the wishes of patients who had come to the end of their lives when choosing whether to care for them according to a “caregiving” strategy or transfer them to an acute period hospital, and which hospital to transfer them to, 43 lawyers ( $N=262$ ; 16.4%) responded that there was “no problem,” and 213 (81.3%) responded that there was “room for improvement.” Meanwhile, 158 of all doctors ( $N=786$ ; 20.1%) responded “no problem” and 543 (69.1%) responded “room for improvement.” This shows a statistically significant difference ( $T$ : test statistics=3.79,  $p < 0.01$ ) in the ratio of “room for improvement” between the two professions. (Table 3)

**Table 3** The perception of problems in treatment strategy decisions in end-of-life care

Occupation	Number of responses (rate)	No problems	Room for improvement	Other
Lawyers	262 (100)	43 (16.4)	213 (81.3)*	6 (2.3)
Doctors	786 (100)	158 (20.1)	543 (69.1)*	85 (10.8)

\*Significant differences were observed between lawyers and doctors ( $p < 0.01$ ).

*Problems in determining treatment strategy at the end of life: solutions to improve end-of-life care (lawyers only)*

As strategies for improvement, 222 lawyers ( $N=259$ ; 85.7%) responded “ensuring transparency in procedures,” 78 (30.1%) suggested “publishing decisions,” and 54 (20.8%) suggested “notification to government.” (Table 4)

**Table 4** Possible solutions to improve end-of-life care (lawyers only; multiple responses)

Solution	Number (rate)
Ensure transparency in procedures	222 (85.7)
Publish decisions	78 (30.1)
Notification to government	54 (20.8)
Total	259 (100)

*Problems in determining treatment strategy at the end of life: handling of living wills*

Among lawyers (N=265), 17 (6.4%) responded that they would “immediately recognize a living will as the author’s intention,” 192 (72.5%) said that it is “material for presuming intention,” and 54 (20.4%) responded that “careful handling for presumption of intention” would be required. Among doctors (N=794), 83 (10.5%) responded that they would “immediately recognize a living will as the author’s intention,” 653 (82.2%) said that it is “material for presuming intention,” and 58 (7.3%) responded that “careful handling for presumption of intention” would be required. This indicates statistically significant differences in the ratio of “presumed to be author’s intention,” (T=3.299, p<0.01) and “careful handling for presumption of intention,” (T=6.024, p<0.01) between lawyers and doctors. (Table 5)

**Table 5** Handling of living wills

Occupation	Number of responses (rate)	Recognized as author’s intention	Presumed to be author’s intention	Careful handling for presumption of intention
Lawyers	265 (100)	17 (6.4)	192 (72.5)*	54 (20.4)*
Doctors	794 (100)	83 (10.4)	653 (82.2)*	58 (7.3)*

\*Significant differences were observed between lawyers and doctors (p<0.05).

*Response when patients do not desire caregiving (only geriatric health services facility)*

When a person did not desire caregiving at an elderly care facility, 285 elderly care doctors (N=320; 89.1%) responded that they would ensure “transfer to the previously decided medical institution,” and 13 (1.3%) responded that they would “decline admission.”

*Assessment of suspension of life support systems (extubation): assessment of withdrawing of life support systems (lawyers)*

For lawyers (N=259), 153 (59.1%) responded that this constituted “feasance,” while 106 (40.9%) responded that it constituted “nonfeasance.” (Table 6a)

**Table 6a** Assessment of suspension of life-support systems

Occupation	Number of responses (rate)	Feasance	Nonfeasance
Lawyers	259 (100)	153 (59.1)	106 (40.1)

*Assessment of suspension of life support systems (extubation): distinction between withdrawing and withholding of life support systems (doctors)*

For doctors, excluding those at geriatric health services facility (N=388), 327 (84.3%) responded that they “distinguish between withdrawing and withholding,” while 61 (15.7%) responded that they “do not distinguish between withdrawing and withholding.” (Table 6b)

**Table 6b** Assessment of suspension of life-support systems

Occupation	Number of responses (rate)	Withdrawing and withholding distinguished	Withdrawing and withholding not distinguished
Doctors	388 (100)	327 (84.3)	61 (15.7)

*Assessment of suspension of life support systems (extubation): legal composition of withholding of life support systems (lawyers)*

Regarding the withholding of life support, of the lawyers (N=261), 151 (57.9%) responded that it was “a question of readable upon the components of a crime,” 101 (38.7%) responded that it was “a question of illegality,” and 9 (3.4%) responded “do not know.” (Table 7)

**Table 7** Legal assessment of withholding of life support systems (lawyers only; multiple responses)

Legal composition of withholding	Responses (rate)
Satisfaction of component requirements	151 (57.9)
Illegality	101 (38.7)
Other	9 (3.4)
Total	261 (100)

## DISCUSSION

Doctors provide medical care to support their patients' lives and ensure their good health. However, as the study of medicine has progressed and techniques for life-prolonging treatment have evolved, it is now possible to prolong life using the latest medical devices, even in cases that would have been considered the end of the natural term of life under past treatment levels. It is now possible to support life in ways that cannot be considered best for patients with treatment techniques that were originally developed to improve the condition of patients' health. In other words, there is a possibility of discrepancies between the introduction or continuation of treatment that respects the quality of life desired by the patient and treatment performed solely to prolong life.

However, Japan's Penal Code emphasizes the supporting of life and orders doctors to maintain life even if the prospects of recovery are poor. Consequently, invasive life-prolonging treatments are now performed merely for doctors to avoid criminal liability. However, perspectives in medical ethics hold that, in some cases, the withdrawal or withholding of life-prolonging treatment that would extend a patient's natural term of life may be permitted.<sup>5</sup> Even so, the current positive law and precedents have merely attempted to suggest this in a small number of court precedents<sup>6</sup> and have not yet clarified whether withdrawing or withholding life-prolonging treatment is justified or required for this.

This survey is the first study to raise and examine questions pertaining to the withdrawal and withholding of life-prolonging treatment at the end of life as a clinical ethical issue among lawyers and doctors in Japan. Cases in which doctors must agonize over their response when treating at the end of life occur in Japan from time to time. A majority of lawyers and doctors responded that guidelines from academic societies are a desirable systematic system to support life-prolonging treatment at the end of life. Japan is hesitant to legislate on end-of-life care, such as laws on death with dignity, and the judiciary also avoids involving itself in this issue.<sup>7</sup> Various administrative bodies, academic societies, and others have formulated guidelines on this issue, but they deal with specialized matters in purely medical settings. Much is expected from the guidelines formulated by academic societies, which are professional bodies, as something to fill in the "gap in the law." In fact, academic society guidelines are not being sufficiently utilized,<sup>8</sup> and they cannot necessarily be expected to be effective in a legal context, including the exemption of doctors from legal liability.<sup>9</sup> The guidelines will function in medical settings only when they function as evidentiary materials that clarify the level of action in end-of-life care and are considered in court.<sup>10</sup>

Japan is moving toward a super-aged society. Elderly people with little prospect for health improvement are increasingly being transferred to advanced medical institutions as emergency patients. Even in extended care facilities providing advanced care for the elderly, if a patient's condition suddenly changes, the wishes of the patient and their family are often vague, and the patient is transferred for acute care, even though recovery is often difficult.<sup>11</sup> Approximately 81% of lawyers and about 69% of doctors responded that there is room for improvement in this regard. In this survey, 89% of elderly-care facility directors responded that they transfer patients who do not actually desire caregiving to an acute care hospital when their condition changes suddenly.

Japan has not created a proper system for living wills, and they serve merely to indicate the author's intentions, leaving them open to the risk of misinterpretation when determining a treatment strategy directly from them.<sup>12</sup> Measures to respect the right to die with dignity will be necessary in the future. In addition to the need for geriatric health service facilities to establish collaboration with doctors, manuals and response methods need to be established through cooperation with academic societies and other related organizations, as well as education on caregiving

and responses in the event of sudden changes.

In Japan, debate continues as to whether the act of suspending life support systems should be legally assessed as “feasance” (an act) or “nonfeasance” (an omission). The United States appears to view the acts of withdrawing and withholding as equivalent.<sup>13</sup> As Japanese courts have taken a reserved stance toward the establishment of crimes of omission,<sup>14</sup> this distinction is a question that cannot be avoided when considering the legal liability of doctors who withdraw treatment. If withdrawing constitutes nonfeasance, the question of satisfaction of the component requirements for the impure crimes of omission of homicide by nonfeasance (Penal Code, Art. 199) and murder by contract (Penal Code, Art. 202) arises. Conversely, if it constitutes feasance, it will satisfy the component requirements for homicide and murder by contract, and a substantial determination will need to be made at the level of illegality.

In this survey, 153 lawyers (59.1%) found that withdrawing constituted “feasance.” However, approximately 84% of the doctors, excluding those at geriatric health service facilities, responded that they distinguished between withdrawing and withholding, implying that the two are not considered equivalent, and this result supports the physicians’ awareness that “once life-prolonging treatment has been introduced, it is difficult to continue it.”<sup>15</sup> In contrast, approximately 40% of lawyers responded that withdrawing constitutes nonfeasance, and some lawyers considered withdrawing and withholding to be equivalent, so this may be an aspect that medical professionals find especially daunting.

In relation to withholding of treatment, there appears to be no objection to the idea that withholding constitutes “nonfeasance” and satisfaction of the component requirements for crimes of omission being called into question. In this survey, approximately 58% of lawyers responded that withholding life support was “a question of satisfaction of the component requirements,” while approximately 39% responded that it was “a question of illegality.” The lawyers who responded that withholding is “a question of illegality” are expected to adopt the stance of not distinguishing between withdrawing and withholding, resulting in a considerable number of legal practitioners who believe that withdrawing and withholding are equivalent.

Procedures considered necessary in relation to the withholding of life-prolonging treatment include ensuring transparency in and publishing decision procedures, and notification to government, as seen in the Netherlands.<sup>16</sup> It is important for each medical institution to normalize end-of-life care by making decisions with reference to guidelines and the like, ensuring the transparency of decision-making procedures, and for the process to be managed by a public institution.

This study has limitations. The lawyers surveyed were limited to the Tokai district, and their response rates were as low as 10.8%. There is some concern regarding whether this study reflects the beliefs of the entirety of each of the two profession, although I included doctors with a variety of viewpoints. Moreover, as for the question contents in the investigation, it is abstract contents about evaluation of the value, different interpretation may be done by a respondent. Therefore; there is risk of being out of findings from a theme of this study.

## CONCLUSION

Doctors are required by law, particularly by the Criminal Code, to support life for patients who have reached the end of their lives and have no prospects for recovery. Therefore, they cannot readily accede if patients or those around them request the withdrawal of treatment. In such cases, doctors tend to overestimate the legal risk of withdrawing or withholding life-prolonging treatment. As Japan moves toward a super-aged society, withdrawing and withholding life-prolonging treatment is an issue of urgency, and it is necessary to develop a system whereby

doctors can respect the right to die with dignity.

## ACKNOWLEDGEMENTS

This survey was conducted under a Grant-in-Aid for Scientific Research C “Examination of the systematic involvement in ethical issues in medical setting”, the AMED Research and Development Grant for Dementia “Construction of an ethical support regime in the construction of a dementia registry system including the pre-clinical period”, and JST Moonshot R&D Grant Number JPMJMS2021. The survey was approved by the ethics committee of the Nagoya University School of Medicine.

## DISCLOSURE STATEMENT

The author has no conflicts of interest directly relevant to the content of this article.

## REFERENCES

- 1 Fukushima Prefectural Ono Hospital Case, Judgement of Aug. 20, 2008, Fukushima District Court, Japan [in Japanese]. *Hanrei Jiho*. 2016;2295:3.
- 2 Iijima Y. Caring for patients and the medical team: guidelines as a solution to issues in the law and ethics of the medical practice [in Japanese]. *J Med Law*. 2016;31:23–29.
- 3 Iijima Y. The ethics of blood transfusion refusal in clinical practice among legal and medical professions in Japan. *Nagoya J Med Sci*. 2020;82:193–204. doi:10.18999/nagjms.82.2.183.
- 4 Ministry of Health, Labour and Welfare. Clinical training designation hospital [in Japanese]. [https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/kenkou\\_iryou/iryou/rinsyo/index.html](https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/kenkou_iryou/iryou/rinsyo/index.html). Accessed December 29, 2020.
- 5 Japan Medical Association. Ishi no shokugyouinri shishin [Professional ethical guidelines for doctors] (3rd ed.) [in Japanese]. [https://www.med.or.jp/dl-med/teireikaiken/20161012\\_2.pdf](https://www.med.or.jp/dl-med/teireikaiken/20161012_2.pdf). Accessed December 30, 2020.
- 6 Tokai University Hospital Case, Judgement of Mar. 25, 2005, Yokohama District Court, Japan [in Japanese]. *Hanrei Jiho*. 1999;1909:130.
- 7 Tanaka S. Seimei rinri e no hōteki kanyo no arikata ni tsuite [Concerning how the law should be involved in bioethics] [in Japanese]. In: Tanaka S, ed. *Gendaihō no tenbō [Contemporary Japan Law in the Perspective of Self-determination]*. Tokyo, Japan: Yuhikaku; 2004:131–176.
- 8 Special committee on how end-of-life care should be conducted in acute medicine. “‘Kyūkyū iryō ni okeru shūmatsuki iryō ni kansuru teigen (gaidorain)’ ni kansuru ankēto kekka hōkoku” [Report on the results of a survey on “An opinion on end-of-life care in acute medicine (guidelines)”] [in Japanese]. *JJAAM*. 2007;19(12):1116–1122.
- 9 Iijima Y. Public Decisions in Medical Practice [in Japanese]. Tokyo, Japan: Shinzansha; 2017.
- 10 Tatsui S. Shūmatsuki iryō to rūru no arikata [End-of-life care and how rules for it should be] [in Japanese]. In: Kai K, ed. *Terminal Care and Medical Law*. Tokyo, Japan: Shinzansha; 2012:215–233.
- 11 Mayumi T, Takemura H, Shimizu K, et al. Questionary survey about the management of sudden cardiac arrest in the nursing home: including advance directives check [in Japanese]. *JJSEM*. 2017;20:521–528.
- 12 Ujike Y. How should we consider the indication of intensive care for very elderly patients? [in Japanese]. *J Jpn Soc Intensive Care Med*. 2016;23:543–545.
- 13 Shintani I. Amerika ni okeru jinkō enmei sochi no sashihikae, chūshi (songenshi) rongi [Discussion of withholding and withdrawing of life-prolonging treatment (death with dignity) in the United States] [in Japanese]. In: Kai K, ed. *Terminal Care and Medical Law*. Tokyo, Japan: Shinzansha; 2012:125–145.
- 14 Ōgoshi Y. Sakui to fusakui [Feasance and nonfeasance] [in Japanese]. In: Abe J. et al, eds. *Keihō kihon kōza, dai-2 kan: Kōsei yōken ron [Penal Code Basic Class, Vol. 2: Theory of component requirements]*. Hogakushoin. 1994:81–92.
- 15 Yokoyama M. Justification for withholding and withdrawing of life-sustaining under the criminal law [in Japanese]. *Keio Law J*. 2018;39:169–221.
- 16 Tak PJP. *Essays on Dutch Criminal Policy*. Nijmegen: Wolf Legal Productions, 2001.