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Confusion in Terminology Related to End-Of-Life Decisions: Euthanasia, Physician-Assisted Suicide and Decisions on Life-Sustaining Treatment – A Survey of Korean Public

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ABSTRACT

Background: Despite high approval for euthanasia and physician-assisted suicide (PAS) reported recently in South Korea, confusion from varying term interpretations must be addressed. This study assesses public understanding of end-of-life terminology and preferred decisions among Koreans.

Methods: An online survey was conducted with 1,000 adult Koreans from June 10 to 14, 2024. To assess their understanding of end-of-life decision terms, participants were presented with scenarios on euthanasia, PAS, and decisions on forgoing life-sustaining treatment (DLST) and asked to select appropriate terms from each of the conventional (natural death, death with dignity, euthanasia) and objective (euthanasia, PAS, DLST) categories. To examine whether agreement levels differed between questions on terms alone and those with scenarios, initial agreement on euthanasia, PAS, death with dignity, natural death, and DLST was measured using a 5-point Likert scale, followed by case-specific agreement for euthanasia, PAS, and DLST. Finally, participants selected their preferred end-of-life decision, assuming terminal cancer.

Results: 1) When scenarios involving euthanasia, PAS, and DLST were presented, respondents correctly identified each medical practice using objective terminology at rates of 37.4%, 53.8%, and 85.9%, respectively. 2) When the same medical practices were presented and respondents were asked to choose conventional terminology, the perception of these practices as "death with dignity" was 27.3% for euthanasia, 34.3% for PAS, and 57.2% for DLST. This result indicates that the subjective term "death with dignity" does not effectively differentiate between the three medical practices. 3) The initial agreement rates with the terms alone were 66.6% for euthanasia, 47.8% for death with dignity, 72.1% for PAS, 72.0% for natural death, and 75.5% for DLST. However, after presenting scenarios explaining each medical practice, some changes in agreement rates were observed. 4) When asked what decision they would personally choose in an end-of-life situation, 35.5% accepted euthanasia, 15.4% accepted PAS, and 41.3% accepted DLST.

SJ, Shin M. Validation: Kim SJ. Visualization:
Kim SJ. Writing - original draft: Kim SJ. Writing
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Conclusion: There is considerable confusion regarding end-of-life decision terminology among Koreans, particularly with “death with dignity,” which significantly confounds opinions on euthanasia and PAS. Therefore, objective terms should be used in end-of-life decisions discussions. Finally, DLST was the most preferred end-of-life decision among Koreans.

Keywords: Confusion; Terminology; End-Of-Life; Euthanasia; Physician-Assisted Suicide; Decisions on Forgoing Life-Sustaining Treatment; Death With Dignity

INTRODUCTION

Many countries including USA,¹ Europe,² Taiwan,³ Japan⁴ and South Korea⁵ allow the decisions on forgoing life-sustaining treatment (DLST) based on advance directives for terminally ill patients, while euthanasia and physician-assisted suicide (PAS) remain controversial globally.⁶⁻⁹

In South Korea, a 2022 survey reported high support for euthanasia and PAS (76.4%),¹⁰ and another study found 82% in favor of legalizing ‘assisted death with dignity.’¹¹ Based on this high support, efforts to legislate PAS have been initiated since 2022. However, in 2018, support for euthanasia was 41.4% and for PAS was 35.9% in Korea.¹² Additionally, a 2022 survey found that only 13.6% prioritized the legalization of PAS as the most important factor for the government to consider regarding a dignified death, suggesting a low priority for PAS.¹³

One reason for the variation in survey results may be the use of the term ‘death with dignity’. This term specifically refers to PAS in the US.⁴ In Korea, many media outlets use ‘death with dignity’ to describe DLST, interpreting it as a general concept (a death that preserves dignity). For example, the case of Cardinal Kim Sou-hwan's decision to withhold life-sustaining treatment (LST) in 2009 was frequently referred to as ‘death with dignity,’ prompting the Korean Catholic Bishops' Conference to issue a statement asserting that “Cardinal Kim's passing was never death with dignity.”^{14,15} Similarly, Severance Hospital case in 2009 is another example of the inaccurate use of the term to describe a decision to withdraw LST.¹⁶ Even, to refer End-of-Life Care Decisions Act, the term ‘death with dignity law’ has often used in Korea.^{17,18}

The term ‘physician-assisted suicide’ has long referred to a doctor prescribing lethal medication to alleviate pain, until the passage of Oregon’s Death with Dignity Act and emergence of the term ‘Medical Assistance in Dying (MAID).’¹⁹⁻²³ Terms like ‘dignity’ and ‘assist’ fail to accurately describe this act and tend to obscure its negative aspects. The WHO defines suicide as “the act of deliberately killing oneself.”²⁴ Some prefer to avoid the term ‘suicide’ believing that PAS, which occurs in a limited time frame of suffering, differs from typical suicide arising from mental illness or impulsive behavior.^{25,26} Nevertheless, in many countries where euthanasia/PAS are permitted, such as the Netherlands and Canada, PAS is legally classified as a form of suicide.^{27,28} ‘MAID’ complicates the distinction between euthanasia and PAS, and may even be misinterpreted as referring to hospice palliative care that alleviates symptoms at the end of life.²⁹ Furthermore, the term ‘assisted dying’ used in the bill being proposed in the UK does not include euthanasia.³⁰ Although similar, their scope of application differs, which can lead to confusion in unified communication. Euthanasia and PAS share the commonality of hastening one's life, but differ in the agent performing the act, resulting in distinct legal and emotional implications.²⁷ Considering

these, this paper adopts the term ‘physician-assisted suicide’ to accurately and objectively express the essence of this act.³¹

Even research that avoids using the term ‘death with dignity’¹⁰ may still be influenced by the long-standing misconception of labeling DLST as ‘passive euthanasia,’^{32,33} a concept argued by Rachels in 1975.³⁴ In countries where euthanasia is legal, it is defined as ‘the actions of a physician who terminates a patient’s life at the patient’s explicit request.’³⁵⁻³⁸ According to these legal definitions, ‘euthanasia’ is an active act that shortens life, making the term ‘passive euthanasia’ a contradiction.^{39,40} DLST, which does not artificially prolong life, does not intentionally shorten life (Fig. 1). Thus, it is the academically considered position of medical organizations such as the British Medical Association,³⁹ European Association of Palliative Care,⁴⁰ American Medical Association,⁴¹ World Medical Association,⁴² not to refer DLST as passive euthanasia.^{39,43} However, in the real world, there appears to be insufficient consensus even among experts.^{12,14} This ambiguity may influence public perception, leading some to confuse ‘euthanasia’ with DLST.

Beyond the issue of terminology, general public often struggle to grasp complex medical procedures based solely on terms or brief explanations. A recent US study found that while initial support for euthanasia or PAS for dementia patients with advance requests was 54.4%, this dropped to 20.7–39.1% after participants read detailed scenarios.⁴⁴ Similarly, another study showed that support for PAS for non-terminal patients decreased from 36.9% to 23.7–28.2% after analyzing scenarios.⁴⁵ These findings indicate that providing specific information can significantly alter public opinion on end-of-life decisions.

Meanwhile, studies conducted in 2022 that reported high approval rates have used leading questions, focusing on advantages or legal intentions while neglecting drawbacks and ethical concerns.^{10,11,46} This lack of balanced information is inappropriate. Additionally, asking about euthanasia and PAS together versus separately can affect public understanding and support. Although the two concepts overlap, they are not identical, so asking them separately would likely yield more accurate information.

This study aimed to assess how accurately the Korean public understands the meanings of terms related to end-of-life decisions, as well as whether providing additional information

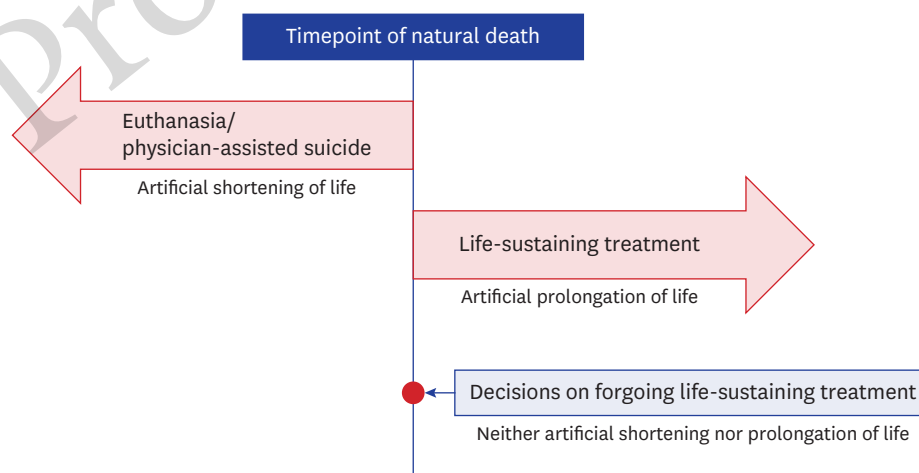


Fig. 1. Concept map of relationship between end-of-life decisions based on timing of natural death.

influences attitudes toward these decisions, and then investigates their preferences regarding these decisions.

METHODS

Study design and participants

We conducted an online survey of 1,000 adults aged 19 or older in Korea from June 10 to 14, 2024. It was hosted on Embrain Online Research Company (Embrain Co., Ltd., Seoul, Korea), which is an online platform with more than 1.75 million survey panels in Korea (as of 2024). For this study, 11,402 invitation emails were sent, 2,346 individuals accessed the survey webpage, and 1,207 participants read and accepted the consent form before completing the survey. Invalid responses, such as straightlining, were excluded from the analysis. Quota sampling was used to match the Korean public on age, sex, and region. The response rate was 51.4%.

Survey

The authors referred to previous US studies that assessed the impact of providing specific contextual information on the consent rates for euthanasia or PAS. Our survey was developed by adapting the situation of Cardinal Sou-hwan Kim's DLST based on expert consensus (Table 1, Fig. 2, Supplementary Data 1). The first author conducted a pilot test with 32 participants. Feedback from participants and the other authors was used to refine the comprehensibility of the survey scenarios and questions.

Fig. 2 outlines the sequence of the survey text and its relationship with the research topics. This study aimed to assess the Korean public's understanding of end-of-life decision terminology. We presented scenarios related to euthanasia, PAS, and DLST, asking respondents to choose the appropriate conventional terms (natural death, death with dignity, euthanasia, or none) and objective terms (euthanasia, PAS, DLST, or none) applied.

Terms like natural death, death with dignity, and even euthanasia (eu [good] – thanatos [death]) do not accurately describe actual actions and are subject to personal interpretations of what is considered natural, dignified, or good. Since 'euthanasia' carries value judgments, this study includes it among conventional term options. At the same time, given consistent global legal definitions, this study also adopts 'euthanasia' as a legal term within the objective options.

Table 1. Scenarios presented in the survey – euthanasia, physician-assisted suicide, and decision on forgoing life-sustaining treatment

Euthanasia
• An 87-year-old man has been diagnosed with terminal cancer with expected life span of 3 months.
• Meanwhile, the cancer spread so much that he became weak and had difficulty breathing, putting him in a critical condition.
• When he briefly regained consciousness after falling into a coma, he <u>requested the healthcare provider to end his life, and died at the hospital after receiving lethal dose of medication administered by the healthcare provider.</u>
Physician-assisted suicide
• An 87-year-old man has been diagnosed with terminal cancer with expected life span of 3 months.
• Meanwhile, the cancer spread so much that he became weak and had difficulty breathing, putting him in a critical condition.
• When he briefly regained consciousness after falling into a coma, he <u>requested the healthcare provider to end his life, and died at home after taking lethal dose of medication prescribed by the hospital.</u>
Decisions on forgoing life-sustaining treatment
• An 87-year-old man has been diagnosed with terminal cancer with expected life span of 3 months.
• Meanwhile, the cancer spread so much that he became weak and had difficulty breathing, putting him in a critical condition.
• When he briefly regained consciousness after falling into a coma, he <u>refused all mechanical treatments (such as ventilators, cardiopulmonary resuscitation, etc.) except for nutrition or hydration, and died after only receiving pain-relieving treatments.</u>

Bold and underlined formatting reflects the original survey text, intended to improve readability and understanding for participants.

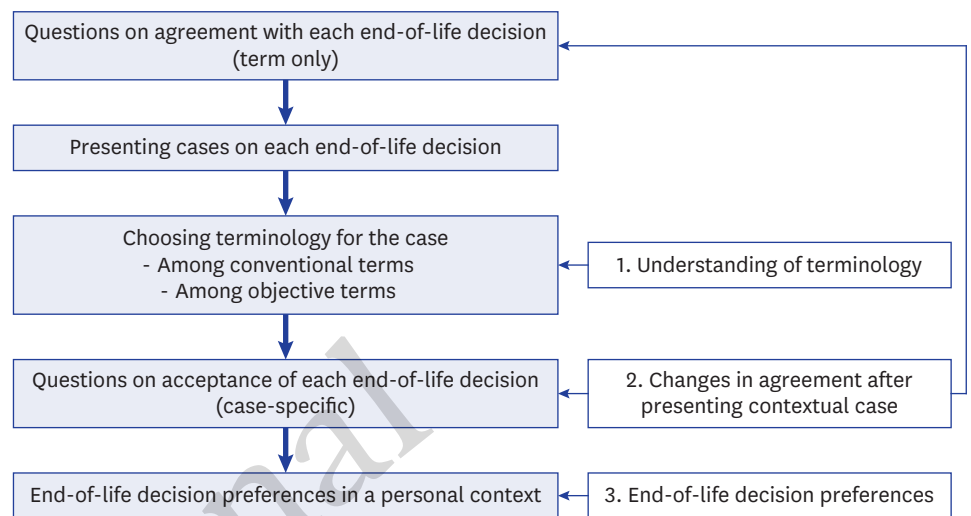


Fig. 2. Schematic flow of the survey questionnaire and its relationship with research topic.

The second goal was to examine the difference in agreement between asking about terms alone and after providing a scenario. Initial agreement on euthanasia, PAS, death with dignity, natural death, and DLST was measured, followed by case-specific acceptance for euthanasia, PAS, and DLST. A five-point Likert scale (strongly disagree – disagree – neutral – agree – strongly agree) was used to assess the level of support.

Finally, to evaluate individuals' end-of-life decision preferences, we asked respondents to choose one option (euthanasia, PAS, DLST, or LST) assuming they were in the same terminal situation as the scenario. This was to account for potential differences between general agreement and personal preference. For instance, a prospective cohort study found that while 60.2% of terminally ill patients supported euthanasia/PAS, only 10.6% would consider it for themselves.⁴⁷

Additionally, to identify factors influencing end-of-life decision-making, we asked about participants' education level, income, subjective health status,^{6,10,48} political orientation,^{6,49} and whether they had any family members or close acquaintances who had received hospice palliative care. Many studies have explored factors influencing attitudes toward euthanasia/PAS, with younger age, lower religiosity, higher education, and socio-economic status being the most consistent factors supporting euthanasia/PAS.⁵⁰

Definitions

We didn't define conventional terms because they can be interpreted differently by individuals. Objective terms were defined as follows (Fig. 1 shows the concept map).

- Euthanasia: The administration of lethal substances by a physician in order to induce death in a patient, aimed at alleviating pain or suffering.
- PAS: The prescription of lethal substances by a physician for the patient to self-administer in order to induce death, aimed at alleviating pain or suffering.
- LST: Medical interventions such as cardiopulmonary resuscitation, dialysis, chemotherapy, and mechanical ventilation administered to patients with no possibility of recovery, aimed solely at prolonging life without therapeutic benefit.

- DLST: The decisions to withdraw or withhold LST, recognizing the patient's autonomy to refuse medical interventions that solely prolong life without therapeutic benefit, aimed at reducing unnecessary pain or suffering.

Statistical analysis

The first analysis calculated the percentage of selected conventional and objective terms for each scenario. The correct rate was the number of respondents selecting the correct objective term divided by the total respondents.

The second analysis compared initial agreement for end-of-life terms and case-specific acceptance for euthanasia, PAS, and DLST scenarios using McNemar's test. Responses were dichotomized into 'agree/strongly agree' and 'all other responses.' Sample size was determined using G-power program (version 3.1.9.7; Heinrich Heine University Düsseldorf, Düsseldorf, Germany) with an alpha level of 0.05, aiming for 90% power, assuming an odds ratio of 0.58 and a proportion of discordant pairs of 0.15, resulting in a calculated sample size of 980, rounded to 1,000 participants. To test the hypothesis that providing an end-of-life decision scenario affects agreement rates, stratified analysis was conducted on support for 'death with dignity,' 'natural death,' age, sex, region, education, income, health status, political orientation, and palliative care experience.

Finally, the percentage of respondents selecting euthanasia, PAS, DLST, and LST as their preferred end-of-life decision was calculated.

Subsequently, univariable analyses were conducted to determine which factors influence term understanding, initial, case-specific responses, and personal end-of-life decisions (χ^2 test or Fisher's exact test). For multivariable analysis, a logistic regression model was utilized. Age, sex, region, education, income, health status, political orientation, and palliative care experience were the independent variables. All analyses were performed using SPSS Version 19 software (IBM Corp., Armonk, NY, USA), with a significance threshold set at $P < 0.05$.

Ethics statement

This study was reviewed and approved by the public Institutional Review Board (IRB) of the Korea National Institute for Bioethics Policy (IRB No. P01-202403-01-009). Informed consent was obtained prior to the online survey.

RESULTS

Participants

The sociodemographic characteristics of the 1,000 respondents are summarized in **Table 2**. The mean age was 45.4 years, and the proportion of females was 49.0%. The population from the metropolitan area accounted for 52.1%, while the middle and small cities accounted for 18.4%, and rural areas accounted for 29.5%.

Term recognition

When scenarios involving euthanasia, PAS, and DLST were presented, respondents correctly identified each medical practice using objective terminology at rates of 37.4%, 53.8%, and 85.9%, respectively (**Table 3**). When the same medical practices were presented and respondents were asked to choose conventional terminology, the perception of these

practices as “death with dignity” was 27.3% for euthanasia, 34.3% for PAS, and 57.2% for DLST (Fig. 3). This result indicates that the subjective term “death with dignity” does not effectively differentiate between the three medical practices.

Factors associated with term recognition

The correct rates for selecting objective terms for euthanasia and PAS were not significantly influenced by participant characteristics. In contrast, the correct rate for DLST was higher among females, those with higher education, and better health. Multivariable analysis revealed significance only for sex and education (Table 4).

Table 2. Survey respondent characteristics (N = 1,000)

Characteristics	Values
Age, yr	
Mean	45.4 ± 13.6
19–29	176 (17.6)
30–39	173 (17.3)
40–49	210 (21.0)
50–59	234 (23.4)
60–69	207 (20.7)
Sex	
Female	490 (49.0)
Male	510 (51.0)
Region	
Metropolitan	521 (52.1)
Middle, small city	184 (18.4)
Rural	295 (29.5)
Education	
High school or less	169 (16.9)
Bachelor's degree or below	729 (72.9)
Graduate degree or higher	102 (10.2)
Household income (monthly, after-tax), 1,000 won	
< 3,000	259 (25.9)
3,000–6,000	470 (47.0)
≥ 6,000	271 (27.1)
Health status (self-assessed)	
Bad	94 (9.4)
Moderate	532 (53.2)
Good	374 (37.4)
Political leanings	
Liberal	267 (26.7)
Moderate	546 (54.6)
Conservative	187 (18.7)
Has anyone close to you experienced hospice palliative care?	
Yes	172 (17.2)
No	828 (82.8)

Values are presented as number (%) or mean ± standard deviation.

Table 3. Objective term recognition rate for each scenario

Variables	Objective term				Incorrect answer rate (%)
	Euthanasia	Physician-assisted suicide	Decisions on forgoing life-sustaining treatment	None of the above	
Scenario					
Euthanasia	374 (37.4)	659 (65.9)	85 (8.5)	14 (1.4)	62.6
Physician-assisted suicide	261 (26.1)	538 (53.8)	102 (10.2)	217 (21.7)	46.2
Decisions on forgoing life-sustaining treatment	42 (4.2)	51 (5.1)	859 (85.9)	70 (7.0)	14.1

Values are presented as number (%).

Bold, correct terminology for each scenario. Because of multiple choice, % sum can exceed 100.

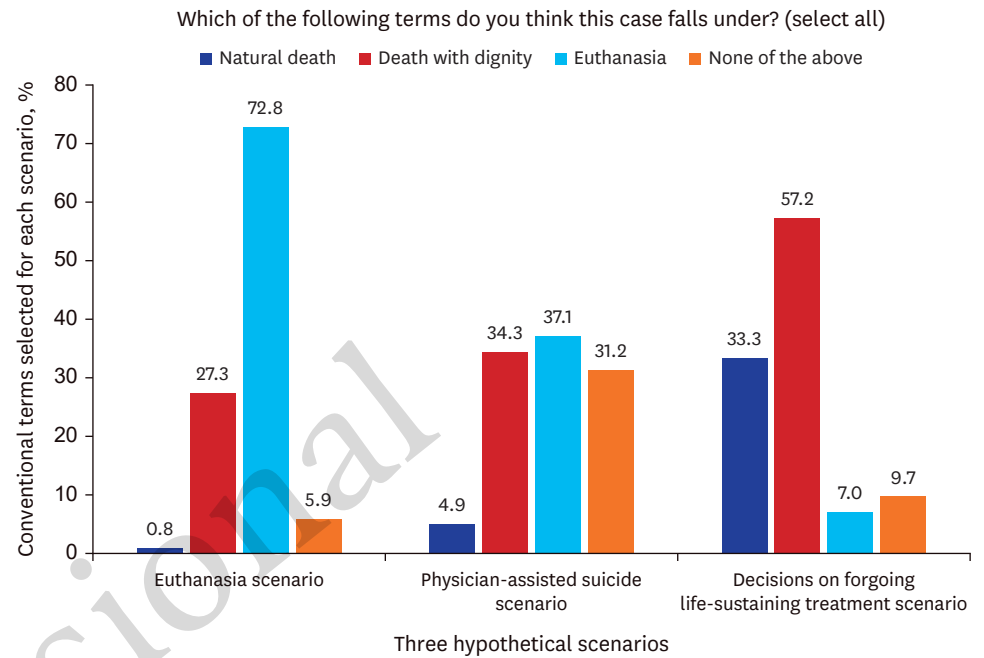


Fig. 3. Conventional terms selected for each scenario – euthanasia, physician-assisted suicide, and decisions on forgoing life-sustaining treatment.

Table 4. Multivariable logistic regression analyses of factors associated with correct rate of the terminology 'decisions on forgoing life-sustaining treatment'

Characteristics	P value	Correct vs. Incorrect (ref)
Age, yr	0.400	
< 50		Ref
≥ 50		0.849 (0.580–1.243)
Sex	0.006	
Male		Ref
Female		1.687 (1.160–2.452)
Region	0.139	
Middle, small city		Ref
Metropolitan		1.548 (0.961–2.496)
Rural		1.138 (0.686–1.888)
Education	0.009	
High school or less		Ref
Bachelor's degree or below		1.794 (1.134–2.837)
Graduate degree or higher		3.042 (1.352–6.845)
Household income (monthly, after-tax), 1,000 won	0.357	
< 3,000		Ref
3,000–6,000		0.895 (0.567–1.412)
≥ 6,000		0.696 (0.414–1.169)
Health status (self-assessed)	0.112	
Moderate		Ref
Bad		0.850 (0.470–1.537)
Good		1.473 (0.976–2.224)
Political leanings	0.208	
Moderate		Ref
Liberal		1.457 (0.923–2.298)
Conservative		1.338 (0.812–2.204)
Has anyone close to you experienced hospice and palliative care?	0.293	
No		Ref
Yes		1.334 (0.780–2.284)

Values are presented as odds ratio (95% confidence interval).
 Bold, 95% confidence interval does not contain the value 1.

Changes before and after scenarios

The initial agreement for euthanasia, PAS, DLST, death with dignity and natural death was 66.6%, 47.8%, 75.5%, 72.1% and 72.0%, respectively. After exposure to the scenarios, the case-specific acceptance for euthanasia, PAS, and DLST was 65.3%, 47.0%, and 81.0%, respectively. In the crude analysis, the initial and case-specific responses changed only for DLST scenario (Supplementary Table 1). However, the stratified analysis based on 'death with dignity' agreement changed also in euthanasia and PAS (Fig. 4). In the 'death with dignity' agree group ($n = 721$), agreement for euthanasia (84.7% $\rightarrow$ 78.4%, $P < 0.001$) and PAS (63.8% $\rightarrow$ 58.0%, $P = 0.007$) decreased after the scenario, while in the 'death with dignity' disagree group ($n = 279$), agreement for euthanasia (19.7% $\rightarrow$ 31.5%, $P < 0.001$) and PAS (6.5% $\rightarrow$ 18.6%, $P < 0.001$) increased. In contrast, stratified analysis by the other factors showed no notable changes from the crude analysis.

The largest opinion change before and after scenario exposure was in PAS responses for the 'death with dignity' agree group (19% agreed to disagree, 13% disagreed to agree), while in the 'death with dignity' disagree group, the largest change was in DLST responses (12% agreed to disagree, 19% disagreed to agree).

End-of-life decision-making in personal contexts and the factors influencing it

Fig. 5 presents the results of a question regarding personal end-of-life decisions. The highest proportion of respondents selected DLST at 41.3%, followed by euthanasia at 35.5%, PAS at 15.4%, and LST at 7.8%.

For individuals under 50, preferences were: DLST 38.1%, euthanasia 35.8%, PAS 14.0%, and LST 12.2%. For those aged 50 and above: DLST 45.4%, euthanasia 35.1%, PAS 17.2%, and LST 2.3% ($P < 0.001$). Among women, DLST was preferred most at 45.1% (euthanasia 31.8%, PAS 16.1%, LST 6.9%), while men preferred euthanasia at 39.0% (DLST 37.6%, PAS 14.7%, LST 8.6%) ($P = 0.041$).

Factors associated with initial and case-specific agreement

Factors associated with initial agreement on euthanasia, PAS, and DLST are summarized in Supplementary Table 2. Euthanasia agreement was higher in those aged 50 and older,

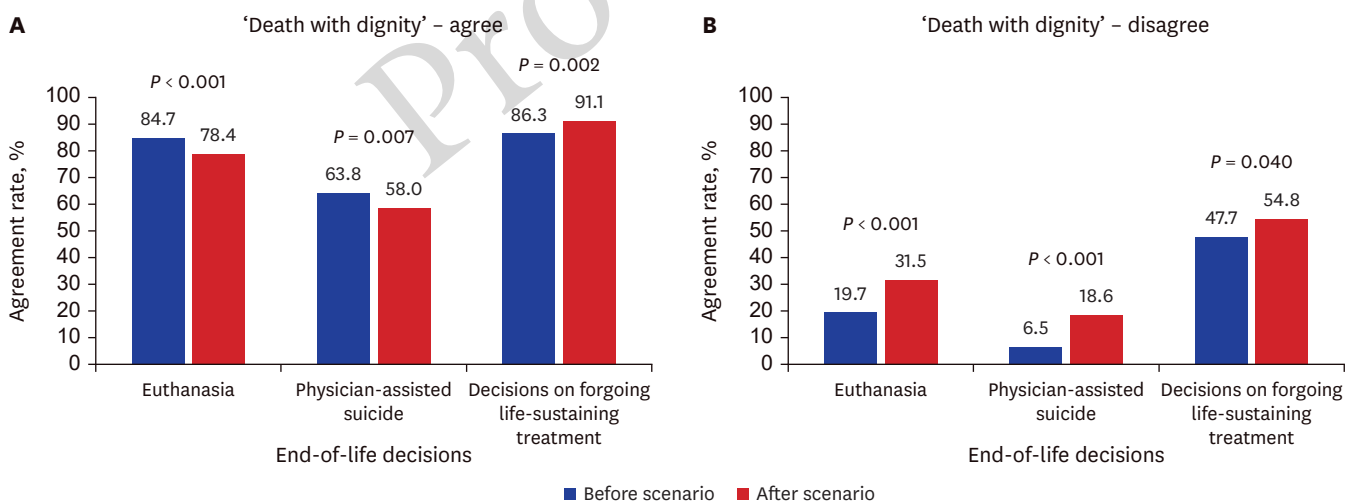


Fig. 4. Stratified analysis based on agreement with 'death with dignity.' Response change after exposure to each end-of-life decision scenario.

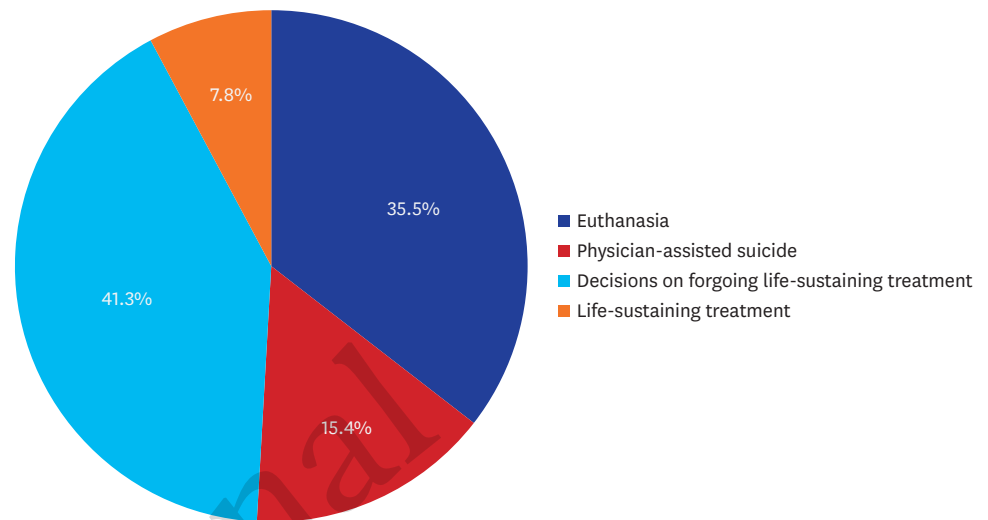


Fig. 5. End-of-life decision-making in personal contexts (N = 1,000).

metropolitan residents, in good health, and with liberal views. PAS agreement was higher in those aged 50 and older, living in metropolitan/rural areas, with higher income, and liberal views. DLST agreement was greater among those aged 50 and older, females, with higher education, in good health, and with liberal stances.

Factors influencing case-specific acceptance of euthanasia, PAS, and DLST are summarized in **Supplementary Table 3**. For euthanasia, support was higher among individuals aged 50 and older, middle-income earners, and those with liberal or conservative views. For PAS, variables' influence diminished after exposure to the scenario, except for age, with those aged 50 and older showing greater acceptance. For DLST, higher acceptance was noted among individuals aged 50 and older, females, those with graduate degrees, higher income, good health, and palliative care experience.

DISCUSSION

This research first demonstrated that the Korean public experiences confusion regarding terms related to end-of-life decisions (**Table 3, Fig. 3**). Notably, over half (57.2%) associated DLST with 'death with dignity,' while 34.3% associated PAS with the same term. Therefore, previous surveys investigating PAS using 'death with dignity'^{11,51} may overestimate PAS support, making them unreliable. Objective terms reflecting the medical perspective are essential in communication, research, and policy on end-of-life decision-making.

The correct rates for euthanasia (37.4%) and PAS (53.8%) were low, highlighting poor understanding, while the DLST correct rate was 85.9%, indicating better understanding and less confusion.

Stratified analysis by 'death with dignity' support showed significant changes in euthanasia and PAS agreement before and after scenario exposure ('death with dignity' agree group decreased, disagree group increased) (**Fig. 4**). The term 'death with dignity' is interpreted in various ways and serves as an important confounder, influencing participants' perceptions of euthanasia and PAS. Meanwhile, the agreement rate for DLST significantly

increased after viewing the scenario, consistently from the crude analysis, suggesting that the scenario may have enhanced understanding and confidence in the terminology.

The most preferred end-of-life decision among Koreans is DLST (41.3%) (Fig. 5). Understanding which end-of-life decision terminally ill patients most prefer is important in clinical contexts, as patients will ultimately make one choice for themselves rather than polling for each option. For policy, both the objective stance and the subjective desires of the public must be considered to accurately gauge the people's will.

In this study, older age groups showed greater support for euthanasia and PAS (Supplementary Tables 2 and 3), contrasting with a systematic review of 21 studies indicating younger individuals tend to favor these options more.⁵⁰ One possible explanation is the sociocultural context of East Asian countries like Korea, where there remains a strong perception that families should care for patients.⁵² In Korea, the low utilization⁵³ and awareness¹³ of palliative care, along with the poor-quality long-term care system for the elderly,⁵⁴ contribute to a high caregiving burden. A 2018 study in Korea indicated that when 'not being a burden to family members' was regarded as essential for a 'good death,' support for euthanasia increased by 1.62 times and support for PAS increased by 1.61 times.¹² Additionally depression, suicidal ideation,^{55,56} and low interpersonal trust⁵⁷ are linked to more favorable attitudes toward euthanasia/PAS. Thus, the high rates of depression⁵⁸ and suicide⁵⁹ among the elderly in Korea may contribute to their strong support for euthanasia/PAS. Improvements in palliative care, long-term care systems, and mental health support for the elderly are needed.

Meanwhile, studies have shown that terminally ill patients requesting euthanasia reported better physical symptoms,⁴⁸ and in the Netherlands, those with better self-rated health were more likely to undergo euthanasia.⁶ In Korea, poorer self-rated health had been reported to be associated with stronger support for euthanasia/PAS.¹⁰ Our study found that individuals with good self-rated health had significantly higher initial agreement on euthanasia and DLST, whereas case-specific acceptance differed only in DLST among those with good health. These findings vary by population and conditions, highlighting the need for further research.^{48,56} Studies frequently reported that individuals with a liberal political orientation were more supportive of euthanasia/PAS.^{6,49,60} In our study, initial agreement was higher for euthanasia, PAS, and DLST in the liberal group, while case-specific acceptance was only higher for euthanasia in the liberal and conservative groups. The initial response reflects initial impressions related to the term itself, while the case-specific response reflects thoughts based on an understanding of the scenario. Compared to the initial response, the case-specific response showed a tendency for reduced influence of characteristics related to euthanasia and PAS, suggesting that after encountering the scenario, participants may have gained insight based on universality and existential considerations, transcending the characteristics. Additionally, those with palliative care experience showed higher acceptance of DLST in case-specific responses, likely due to a better understanding of the context of DLST from real-life palliative care experience.

Finally, this study found lower agreement for euthanasia (66.6%) and PAS (47.8%) than earlier 2022 studies (76.4% for euthanasia or PAS¹⁰ and 82% for 'assisted death with dignity' legalization).¹¹ Several factors explain this discrepancy. This study used neutral and objective questions, did not ask about PAS using 'death with dignity,' and posed separate questions for euthanasia and PAS, allowing distinct assessment of agreement with each.

This study has several limitations. First, while quota sampling was used to match age, sex, and region for representative sample, it was not probabilistic. Online surveys may have included more active internet users, and those particularly interested in end-of-life decision-making may have been more likely to complete the survey. Second, the survey's scenarios, though generally acceptable, could not encompass all complex medical and ethical situations. Third, religiosity, known to be a consistent variable in supporting euthanasia/PAS, was not included and will be addressed in future studies. Fourth, the scenarios featured an 87-year-old male patient, which may have resulted in overestimation of euthanasia/PAS support, as support for these options tends to be higher for older patients.^{60,61}

This study observed a prevalent confusion surrounding end-of-life decision terminology among Koreans, complicating accurate discussions. Responses based solely on terminology differed from those after presenting a patient case. Ultimately, the public's most preferred end-of-life decision was DLST.

We advocate for using objective terminology based on medical practices and providing balanced context in future surveys and policy discussions to enable the public to make end-of-life decisions reflecting their values.

SUPPLEMENTARY MATERIALS

Supplementary Data 1

Survey text

Supplementary Table 1

Changes from initial response^a to case-specific response

Supplementary Table 2

Multivariable logistic regression analyses of factors associated with initial agreement^a of euthanasia, physician-assisted suicide and decisions on forgoing life-sustaining treatment

Supplementary Table 3

Multivariable logistic regression analyses of factors associated with case-specific agreement^a of euthanasia, physician-assisted suicide and decisions on forgoing life-sustaining treatment

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