

## Changing Attitudes toward Medical Assistance in Dying: A Comparative Survey of Doctors and Nurses at an Icelandic University Hospital, 1995–2021

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### Abstract

A 2021 questionnaire explored the perspectives of physicians and nurses at Landspítali Iceland University Hospital (LIUH) regarding medical assistance in dying (MAID). The inquiry focused on their supporting arguments, the required eligibility standards, and preferred methods for carrying it out. Earlier investigations from 1995 and 2010 that targeted the same professional groups provided a basis for direct comparison. Questionnaires were dispatched to 357 physicians and 516 nurses employed at LIUH. The instrument contained seven primary items plus various additional sub-items. Replies were examined according to occupational category, age bracket, and whether the respondent held specialist credentials. Analysis relied on both summary statistics and tests for statistical inference.

Altogether, 135 physicians responded (38% response rate), and 103 nurses responded (20% response rate). These replies accounted for 27% of the entire targeted population. Among all who answered, 145 individuals (61%) supported MAID, most often justifying their stance on the principle of patient self-determination. The 95% margin of error for this overall level of support was  $\pm 6.2\%$ . When set against the 19% recorded in 2010, endorsement levels had tripled by 2021 ( $P < 0.05$ ). Roughly 18% of respondents rejected MAID under all circumstances, mainly invoking the obligation to safeguard human life or citing a fundamental clash with the proper duties of healthcare staff. In addition, 19% of participants expressed no firm opinion on the issue, commonly attributing their hesitation to the subject's intricate and multifaceted nature. Relative to prior questionnaires, this investigation documented a marked increase in supportive attitudes toward MAID across the sampled healthcare workforce. Participant responses illuminated the core factors shaping their positions, notably the balance between honoring patient dignity and personal choice on one side and the professional responsibility to avoid ending life or to focus exclusively on comfort measures on the other, along with observable variations by professional role.

**Keywords:** Medical assistance in dying (MAID), Views on euthanasia, Physician-assisted suicide, Health care professionals, Legal loophole, Arguments

### Introduction

For more than a decade, no systematic assessment had been made of how physicians and nurses in the clinical units of Landspítali, Iceland University Hospital (LIUH) regarded euthanasia, nor had the ethical foundations of

those views been documented. To fill this gap, an internet-based questionnaire was administered in April 2021 to members of this professional community. Within the project, euthanasia referred to the provision of professional medical assistance in dying (MAID) to someone who actively seeks help to terminate their existence. The current work applies a broad definition of MAID: any physician-delivered aid (whether active or passive) intended to bring about death, irrespective of whether national law expressly authorizes it or whether it occurs under conditions of legal protection or exemption, such as the exploitation of an existing legal loophole. As an inclusive label, MAID covers every variety of

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medically facilitated death. It therefore incorporates the concepts that the European Association of Palliative Care [1] and numerous academic writers [2-4] have labelled as euthanasia—the intentional delivery of a fatal substance by a doctor (“killing on request”) in response to a clear, voluntary, and competent plea from the individual—and physician-assisted suicide (PAS), whereby a doctor supplies a lethal prescription that the patient then uses independently after making a voluntary and competent request. Because MAID stretches beyond these narrower categories, the term aligns more closely with the full spectrum of situations under review here and accurately renders the Icelandic wording originally chosen for the survey (additional detail appears further on).

Internationally, public and professional sentiment regarding MAID has shifted progressively since the practice gained legal status in a handful of nations shortly after 2000 [4]. Although the count of jurisdictions allowing some version of MAID has risen modestly in the intervening period, opposition remains the dominant position in most parts of the world. Resistance is especially strong across Asia and Africa, where not a single country has sanctioned assisted dying. As of late 2023, the nations that had enacted laws permitting MAID comprised the Netherlands, Belgium, Luxembourg, Spain, Portugal, Canada, New Zealand, and Colombia. Within both the United States (US) and Australia, authority to approve or prohibit assisted dying rests with individual states or territories rather than the federal level. After Oregon became the first US state to permit the practice in 1998, nine more states followed suit. Every one of Australia’s six states, each possessing its own law-making powers, has now authorized assisted dying; the two primary territories, however, continue to forbid it. Certain court decisions have also created pathways for assisted dying without formal legislation by granting legal immunity, a notable instance being the 2020 judgment of the German Federal Constitutional Court, even though that country still lacks an official regulatory system for MAID [5]. Assisted suicide itself is lawful in Switzerland [6] and Austria [7].

Legal frameworks that authorize MAID generally share several essential prerequisites: the individual making the request must suffer from a condition that cannot be cured, endure suffering that feels intolerable, and demonstrate complete awareness of the permanent consequences of the step they are taking. Once such a request reaches medical staff, a pair of independent physicians must review and affirm its legitimacy. Key distinctions among

existing laws center on whether the requester must be in the terminal phase of illness (a rule applied in most settings, typically defined as a life expectancy of less than 6 months) or whether terminal status is unnecessary, as in the Benelux nations. Further differences concern the delivery method: whether the physician may administer the lethal agent directly (direct MAID), whether the patient alone may ingest or inject the substance (indirect MAID), or whether both routes are offered as options [8]. MAID remains prohibited under Icelandic law. Article 23 of the Icelandic Act on Patients’ Rights [9] requires that suffering be relieved for patients who are dying, and Article 24 of the same legislation affirms the right to die with dignity. Nevertheless, the law makes no mention of medically assisted dying or any other form of assisted death, which continues to be unlawful in Iceland under Article 213 of the 1940 Penal Code [10].

Surveys examining the attitudes of doctors and nurses working in LIUH’s clinical departments were conducted in 1995 and 2010. LIUH is Iceland’s largest hospital by a considerable margin and serves as the country’s sole tertiary referral center, offering all medical specialties. It provides direct care to roughly 64% of the national population, primarily those living in Reykjavík and the surrounding communities. The next-largest facilities comprise 6 secondary hospitals and 5 smaller ones, spread across the country, each serving approximately 4%–8% of the population. Footnote 1 Both earlier studies carried the title “Views of Icelandic physicians and nurses towards limitation of treatment at the end of life” and were also administered online [11, 12]. Footnote 2 At the time of the 1995 survey, public discussion of MAID within Iceland’s medical community had only just started, whereas by 2010 the conversation had become well established. Since then, the debate has expanded significantly, featuring prominently at several medical conferences held in 2015 and 2016, in various journal articles, at the biannual gatherings of the Nordic Medical Ethical Council since 2013, and at international forums, including the World Medical Association’s World Congress held in Reykjavík during the autumn of 2018. Broader societal discussion in Iceland has also been extensive, for instance through events organised by the Icelandic Ethical Humanist Association (Siðmennt) in 2015 [13], activities of Iceland’s Right to Die Society (Lífsvirðing) beginning in 2017, sessions at the University of Iceland’s Institute of Continuing Education in 2019, and parliamentary activity in Alþingi that generated formal resolution proposals during 2016–2017

[14] and again in 2023 [15]. Most recently, draft legislation in favor of MAID was introduced in parliament in spring 2024 [16].

Only a limited number of surveys on MAID have been conducted in Iceland. In November 2015, Siðmennt (the Icelandic Ethical Humanist Association) commissioned Maskína Inc. to conduct a nationwide poll among 782 Icelanders aged 18–75. That poll found that 75.9% of participants favored MAID, 18% remained undecided, and 7.1% opposed it. However, the study was neither peer-reviewed nor formally published [13]. Apart from this general population poll and the present 2021 investigation of physicians and nurses at LIUH (along with the matching 1995 and 2010 surveys on the same groups), no additional surveys on MAID had been conducted in Iceland up to 2021. Following the completion of our survey and the publication of this paper, one further study was undertaken. Commissioned by the Icelandic Ministry of Health in May 2023 and executed by Gallup Inc., it surveyed separate samples of 400 physicians and 400 nurses drawn from a broad spectrum of medical and nursing specialties. Among the responding physicians ( $n = 133$ , 33% response rate), 56% supported MAID, while 12% were undecided and 32% opposed it. Among the responding nurses ( $n = 115$ , 29% response rate), 86% responded positively, 7% were undecided, and 7% were opposed. Like the earlier general survey, this Ministry-commissioned study was not peer-reviewed or published in a scientific journal [17].

Given the ongoing international expansion of MAID legalization across Western nations and the sustained public debate that has persisted for 11 years since the 2010 survey of this same professional group, the decision was made to repeat the investigation using an identically defined population of healthcare professionals. On this occasion, the questionnaire was substantially updated and expanded, resulting in a more targeted and contemporary instrument that reflected growing societal awareness and understanding of the issue. The central objective remained the same as in previous rounds: to track changes in attitudes toward the acceptability of MAID and, crucially, to investigate the underlying reasons for those attitudes regardless of whether participants were in favor, opposed, or uncertain. This approach allowed the research to outline the principal patterns of ethical reasoning on the topic—something that, to our knowledge, had not been systematically

mapped before in Iceland or in comparable international studies.

In discussions surrounding MAID, both the underlying concept and the most appropriate terminology have been frequently debated. The Greek term “*euthanasia*” literally translates as “good death” and has long been understood as the act of accelerating a patient’s death to spare them from continued suffering [18]. Throughout most of the 20th century in Iceland, the common Icelandic expression for euthanasia was “*líknardráp*” (palliative killing). Around 2010, however, the phrase “*dánaraðstoð*” (assistance in dying) was introduced, and by 2021 it had gained widespread acceptance in public discourse. It was unclear whether healthcare professionals preferred one term over the other or used entirely different wording. To prevent any unintended bias, both Icelandic expressions were therefore included side by side in every relevant survey question. In the English version of this paper, the acronym MAID is employed as the overarching term encompassing both expressions, since a strict distinction between them is not required in this context.

In the questionnaire itself, each question and response option included a brief clarification of the specific form of assistance being referred to. This design enabled the study to examine participants’ views on several well-known models: MAID delivered within a robust, legally regulated framework; MAID made possible through a legal loophole; assistance for patients who are incurably ill, suffering, and nearing death versus those who are chronically ill and suffering but not terminally ill; and assistance provided through either direct MAID (administered by a physician) or indirect MAID (self-administered by the patient). The inclusion of a legal-loophole option was motivated by the position of certain scholars who do not oppose MAID in principle but hesitate to endorse explicit legalization [19, 20]. This particular option had not been explored in prior surveys, to our knowledge, and it introduced greater variety into the range of choices. It was therefore of interest to determine whether this alternative would attract meaningful support. Because the legal-loophole option was added, the broad acronym MAID was preferred over separately listing euthanasia (direct MAID) and PAS (indirect MAID). The survey did not cover every conceivable variant of MAID, such as involvement of private organizations, administration of lethal drugs by nurses, or application of less stringent eligibility criteria,

nor did it examine assisted suicide (AS) limited to non-medical civilians or civil organizations.

## Materials and Methods

### *Study population and composition*

The survey, titled “Ethical treatment issues at the end of life,” was conducted in April 2021. The intended study population included 357 doctors, divided into specialists and general practitioners, and 516 nurses, divided into general nurses and those with specialist qualifications (**Table 1**). These individuals represented all employed doctors and nurses working in the clinical wards at LIUH who provide active patient treatment. Footnote 4 In 2021, the hospital employed a total of 6177 staff members [21]. Department selection followed the same pattern used in the two earlier surveys. As this was a follow-up investigation, particular attention was paid to maintaining consistency in the study population for the core MAID question. Because no dedicated specialist palliative care ward existed in 1995 (a small unit was created later with limited staffing), it was excluded from both the 2010 and 2021 surveys. No attempt was made to enforce balanced representation by profession or gender when selecting participants. Given the strong gender imbalance within nursing and the risk that the views of the small number of male nurses could be personally identifiable, no question about sex was included. Data on the age distribution within the two main professional groups were not available.

The questionnaire comprised seven main questions, each with up to four sub-questions. Only the item asking participants to identify their profession was mandatory; all other questions could be left unanswered. Age was recorded by assigning respondents to predefined age brackets. All responses were presented in a multiple-choice format, and most questions included an “Other: \_\_\_” field allowing participants to provide free-text explanations when none of the listed options matched their views. Because the survey employed the broader term MAID rather than the narrower labels PAS and euthanasia, and because it directly probed the reasons underlying participants’ positions (an approach with no known precedent), the entire questionnaire was developed for this study. When designing the items, priority was given to placing the most central issues first, followed by more detailed or secondary questions. No interest was taken in measuring degrees of agreement or disagreement, so Likert-style scales were not used. The

wording was kept straightforward and accessible to the target professional audience. To strengthen content validity and ensure clarity, the draft was reviewed by an experienced philosopher and an independent Icelandic-language scholar from outside the research team. It was also submitted for evaluation by an ethics committee (details provided below). The complete set of survey questions appears in **Tables 1-6**, and the full dataset is available in a supplementary spreadsheet.

### *Implementation*

Following formal approval from the Ethics Committee for Administrative Research at Landspítali (document no. 5/2021, granted on 23.03.2021), every selected participant received an explanatory email containing a direct link to the questionnaire. Three additional reminder messages were dispatched at later intervals. The survey ran on the Limesurvey 1.92+ platform. All respondents gave their informed consent before starting. No one requested to withdraw during the data collection period or up to the completion of this manuscript. All answers were gathered anonymously, with no identifying personal information attached.

### *Statistical processing*

Analyses were carried out using R and Microsoft Excel. The chi-square test was used to assess categorical, non-continuous variables, and a P-value < 0.05 was taken to indicate statistical significance. Margins of error for the primary affirmative responses were determined at the 95% confidence level under the assumption of normal distribution. Replies were broken down and compared by professional role, age bracket, and training level (general versus specialist). A Z-test allowed direct comparison with findings from the earlier surveys. The smallest sample size needed to achieve adequate statistical power was computed based on the anticipated shift in the proportion of positive answers between this survey and the most recent previous one, applying an alpha of 0.05 and 90% power (1-β).

## Results and Discussion

Completed questionnaires were returned by 135 of the 357 doctors targeted (37.9%). Within this group, 36 worked as general practitioners and 99 held specialist positions. Among nurses, 103 responses arrived out of 516 (19.9%), with 75 coming from general nurses and 28 from those possessing specialist credentials. In total, 238

healthcare professionals took part (Table 1). The combined response rate was 27.2%, a clear drop from the rates observed in the two prior studies on the same professional groups. The 2010 survey achieved 48.6% (48.3% for nurses and 48.9% for doctors), while the 1995

survey reached 55.3% (51.9% for nurses and 59.8% for doctors).

All participants were invited to express their general stance on medical assistance in dying (MAID). They could select from five preset choices or add a free-text comment via the open “Other” field (Table 1).

**Table 1.** Responses to: What is your position on medical assistance in dying (MAID)? From: Views on medical assistance in dying and related arguments: a survey of doctors and nurses at a university hospital

Response category	Doctors ( $\sigma = 357$ )			Nurses ( $\sigma = 516$ )			Overall ( $\sigma = 873$ )
	General (n = 36)	Specialists (n = 99)	All doctors (n = 135)	General (n = 75)	Specialists (n = 28)	All nurses (n = 103)	All (n = 238)
a) No support for MAID in any form	4 (11%)	29 (29%)	33 (24%) <sup>a</sup>	8 (11%)	2 (7%)	10 (10%)	43 <sup>b</sup> (18%)
b) Support for MAID following a lawful and responsible assessment of terminally ill patients requesting it and experiencing persistent, unbearable suffering	19 (53%)	38 (38%)	57 (42%)	41 (55%)	14 (50%)	55 (53%)	112 (47%)
c) Support for establishing a legal framework allowing MAID in exceptional humanitarian cases for dying patients, based on professional judgment and consultation	4 (11%)	12 (12%)	16 (12%)	10 (13%)	8 (29%)	18 (17%)	34 (14%)
d) Undecided / no formed opinion	9 (25%)	19 (19%)	28 (21%)	15 (20%)	3 (11%)	18 (17%)	46 (19%)
e) Other responses	0 (0%)	2 (2%)	2 (1%)	1 (1%)	1 (3%)	2 (2%)	4 (2%)

1. n = number in the sample, and  $\sigma$  = number in the study population. The results are presented as the number (percentage %) of choices for each option

2. a: There was a significant difference in the compliance of the specialist doctors with answer option a) compared to that of the general doctors ( $P = 0.03$ ). b: There was a significant difference in the choice of doctors compared to nurses regarding answer option (a) ( $P = 0.003$ ). According to the combined responses to Items (b) and c), nurses (almost 71%) were significantly more likely to respond positively ( $P = 0.008$ ) than doctors (54%)

Option b), which described legalized MAID restricted to patients who are dying, attracted the highest share overall at 47%. Doctors selected it in 42% of cases, and nurses in 53%. General practitioners chose this option more frequently (53%) than specialists (38%), but the difference did not reach statistical significance ( $P = 0.13$ ). Slightly above 14% of all respondents endorsed MAID made possible through a legal loophole (option c). Specialist nurses chose this option more often (29%) than general nurses (13%), with the difference approaching significance ( $P = 0.07$ ).

Combining options b) and c) produced an overall positive stance toward MAID of 61%, formed by 54% of doctors and 71% of nurses. The difference between the two professions proved statistically significant ( $P = 0.008$ ). The 95% margin of error around this combined figure measured  $\pm 8.4\%$  for doctors,  $\pm 8.8\%$  for nurses, and  $\pm 6.2\%$  across the full sample.

Option a) — outright rejection of MAID in every form — was selected by 29% of specialists, markedly higher than the 11% recorded among general practitioners ( $P = 0.03$ ). Taken together, doctors opposed MAID entirely at a rate of 24%, compared with only 10% of nurses, a contrast that reached clear significance ( $P = 0.003$ ).

Age breakdown across both professional groups showed the following distribution: 20–39 years accounted for 34% (28% of doctors, 43% of nurses), 40–59 years for 48% (50% of doctors, 47% of nurses), and 60 years and older for 18% (13% of doctors, 22% of nurses). Among those 60 and above, 35% rejected MAID completely, compared with just 11% of the 20–39-year-old age group ( $P < 0.05$ ) (Table 2). Younger participants in both the 20–39 years and 40–59 years brackets displayed significantly stronger support for MAID than the oldest group ( $P < 0.05$ ). The younger cohorts also tended to express more uncertainty, although this trend did not

attain statistical significance ( $P = 0.08$ ). Responses from the two younger age bands did not differ meaningfully.

**Table 2.** Responses to: “What is your attitude towards MAID?” By age group, regardless of profession. From: Views on medical assistance in dying and related arguments: a survey of doctors and nurses at a university hospital

Response category	20–39 years (n = 81)	40–59 years (n = 114)	≥ 60 years (n = 43)	Overall (n = 238)
a) No support for MAID in any form	9 (11%)	19 (17%)	15 (35%)	43 (18%)
b) Support for MAID following a lawful and responsible evaluation of terminally ill patients who request it and experience persistent, unbearable suffering	42 (52%)	57 (50%)	13 (30%)	112 (47%)
c) Support for a legal provision allowing MAID in exceptional humanitarian circumstances based on professional judgment and consultation	10 (12%)	15 (13%)	9 (21%)	34 (14%)
d) Undecided / no definite opinion formed	20 (25%)	21 (18%)	5 (12%)	46 (19%)
e) Other responses	0 (0%)	2 (2%)	1 (2%)	3 (2%)

I. N: number in sample. The results are presented as the number (percentage %) of choices for each option

Individuals aged 60 years and older picked option a) far more often and option b) far less often than participants in the younger categories ( $P < 0.05$ ). The 20–39 years age group selected option d) at twice the rate (25%) of the > 60 years group (12%), but the difference lacked significance ( $P = 0.08$ ). No other notable differences ( $P > 0.05$ ) were observed between the two younger age groups across the five main choices.

Those who rejected MAID under all circumstances answered a follow-up item about their underlying motivations. They could mark up to six reasons or supply a written explanation (**Table 3**). The two most widely endorsed reasons centered on the core aims of the healthcare profession — relieving suffering (70%) and refraining from killing (60%). Nurses stood out by

selecting the view that assisted dying must never become a patient entitlement or a doctor’s responsibility (70%), which ranked as the fourth most common reason overall and showed a significant gap compared with doctors (33%) ( $P < 0.05$ ). Doctors more frequently raised the possibility that patients might feel pressured into requesting assistance (64%), a concern expressed at a level approaching significance relative to nurses (30%) ( $P = 0.06$ ). Three individuals (7%) used the “Other” field for written comments. One noted being “not entirely against MAID in theory but unwilling to deliver it personally.” Another common request stems from not wanting to burden family members. The third comment fell outside the topic.

**Table 3.** Participants’ chosen reasons why they did “not support MAID of any kind.” From: Views on medical assistance in dying and related arguments: a survey of doctors and nurses at a university hospital

Reasons reported by participants who indicated no support for MAID in any form	Doctors (n = 33)	Nurses (n = 10)	Overall (n = 43)
Individuals experiencing existential distress at the end of life should receive the highest standard of palliative care available, which represents the most appropriate support health professionals can provide.	25 (76%)	5 (50%)	30 (70%)
Ending a person’s life is inconsistent with the ethical objectives of the medical and nursing professions.	21 (64%)	5 (50%)	26 (60%)
There is a concern that individuals may feel pressured to request assisted dying because of adverse circumstances or social influence.	21 (64%)	3 (30%) <sup>a</sup>	24 (56%)
Assistance in dying should never be regarded as a moral right of the patient or an obligation of the physician before natural death occurs.	11 (33%)	7 (70%) <sup>b</sup>	18 (42%)
All healthcare systems are subject to error; because death is irreversible, an incorrectly decided euthanasia case cannot be undone, making the consequence too severe.	13 (39%)	4 (40%)	17 (40%)
The sanctity of human life is absolute, and no circumstance justifies intentionally shortening a person’s life.	3 (9%)	1 (10%)	4 (9%)

Other reasons	3 (9%)	0 (0%)	3 (7%)
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1. N: number in sample. The results are presented as the number (percentage %) of choices for each option

2. Participants could choose one or more reasons

3. a: There was an almost significant difference ( $P = 0.06$ ) between professions, but the sample size decreased among the subgroups. b: Between the professions, there was a significant difference ( $P = 0.04$ ) in favor of this reason

The 47% of participants who favored legalized MAID for dying or severely suffering patients under a carefully regulated system (option b) moved on to four additional sub-questions. The first invited them to provide supporting arguments; they could select up to 7 reasons or add free text under “Other” (Table 4). A single statistically significant difference emerged between

professions ( $P = 0.003$ ): nurses (36%) were far more likely than doctors (11%) to state that the precise arguments mattered less than simply ensuring a trustworthy pathway exists so that those who desire MAID do not have to suffer silently or feel ashamed about seeking help.

**Table 4.** Participants’ choice of reasons for supporting MAID for dying patients through a legitimate process. From: Views on medical assistance in dying and related arguments: a survey of doctors and nurses at a university hospital

Reasons reported by participants in favor of legalized MAID	Doctors (n = 57)	Nurses (n = 55)	Overall (n = 112)
Individuals facing existential distress and unbearable suffering at the end of life should have the option to choose between palliative care and requesting assisted dying within a secure legal framework.	32 (56%)	33 (60%)	65 (58%)
Full autonomy over one’s own life is among the most fundamental moral principles; requesting assisted dying reflects a wish to die with dignity, on one’s own terms, and at a chosen time.	30 (53%)	33 (60%)	63 (56%)
Although life remains a fundamental value, in the context of terminal illness and intolerable suffering, assisted dying may represent the final good sought from the healthcare system.	21 (37%)	28 (51%)	49 (44%)
The purpose of healthcare professionals is not to end life; however, MAID is initiated solely at the request of the dying individual and is not proposed by professionals. From the patient’s perspective, it may be regarded as beneficence rather than harm.	22 (39%)	19 (35%)	41 (37%)
Even in the absence of an explicit legal or moral right to receive MAID from doctors or nurses, a system permitting optional professional involvement may still be ethically justified.	20 (35%) <sup>a</sup>	11 (20%) <sup>a</sup>	31 (28%)
The specific reasons may be less important than ensuring a reliable MAID option is available so that individuals seeking it do not experience shame or distress due to a lack of access.	6 (11%) <sup>b</sup>	20 (36%) <sup>b</sup>	26 (23%)
The likelihood of misuse within a well-regulated MAID system is considered minimal; requests should be repeated and assessed by two physicians.	10 (18%)	10 (18%)	20 (18%)
Other reasons	2 (4%)	2 (4%)	4 (4%)

1. N: number in sample. The results are presented as the number (percentage %) of choices for each option. Participants could choose one or more reasons

2. a: Not significantly different ( $P = 0.07$ ). b Significantly different ( $P = 0.003$ ) between the professions (mostly because general nurses (17 of 20 nurses) were in favor of this). There was no other statistically significant difference in the responses of respondents between the professions

The three remaining sub-questions probed supporters’ opinions on the requester’s necessary medical condition, the rights and duties involved, and how the procedure itself should be carried out (Table 5).

**Table 5.** The results of subquestions about the conditions, duties, and issues in the implementation of MAID for those participants who were in favor of legalized MAID. From: Views on medical assistance in dying and related arguments: a survey of doctors and nurses at a university hospital

Views of participants in favor of legalized MAID	Doctors	Nurses	Overall
With respect to the health status of a patient requesting MAID	N = 57	N = 49	N = 106
Only terminally ill patients should be eligible	27 (47%)	30 (61%)	57 (54%)

In addition to terminally ill patients, chronically ill individuals experiencing unbearable existential suffering may also be eligible	30 (53%)	19 (39%)	49 (46%)
<b>Concerning choice, rights, and obligations</b>			
	<b>N = 53</b>	<b>N = 50</b>	<b>N = 103</b>
Patients should possess the right to MAID, and accordingly, the physician/healthcare system should have a duty to provide it	1 (2%)	12 (24%)	13 (13%)
Patients should have the right to request MAID, but not an automatic right to its provision; therefore, physicians or the healthcare system are not obligated to perform it. MAID should remain optional	52 (98%)	38 (76%) <sup>a</sup>	90 (87%)
<b>Regarding the mode of implementation</b>			
	<b>N = 53</b>	<b>N = 51</b>	<b>N = 104</b>
The treating physician directly administers and performs euthanasia	7 (13%)	7 (14%)	14 (14%)
The physician prescribes a lethal medication that the patient self-administers	11 (21%)	10 (20%)	21 (20%)
The physician may either directly perform euthanasia or provide the prescription	25 (47%)	22 (43%)	47 (45%)
Other responses	10 (19%)	12 (24%)	22 (21%)

1. N: number in sample. The results are presented as the number (percentage %) of choices for each option

2. One answer was allowed for each question

3. a: Here, a significant difference was found between the professions ( $P < 0.05$ ). There was no significant difference in other response items

Each question permitted only one selection. Slightly more than half the supporters (54%), across both professions, held the view that legalized MAID “should be limited to patients who are dying” rather than extending to “chronically ill individuals facing unbearable existential distress.” An overwhelming 87% agreed that MAID “must not become a compulsory service inside the healthcare system.” On the question of delivery method, 45% supported giving physicians the flexibility to either administer lethal medication directly (euthanasia/direct MAID) or supply a prescription for patient self-administration (indirect MAID). Another 14% preferred restricting the practice to direct

administration, and 20% favored indirect administration only. The final 21% ( $n = 22$ ) chose “Other,” the largest category in the entire survey. Within these open responses, 8% expressed uncertainty about the best method, 6% proposed allowing nurses to deliver the medication, 2% insisted the attending physician should not participate, 2% highlighted safety concerns related to patients storing lethal drugs at home, 1% argued that physicians should play no role whatsoever, and 3% offered comments unrelated to the question.

Participants who indicated uncertainty about their overall position on MAID answered a follow-up question exploring the sources of that uncertainty (**Table 6**).

**Table 6.** Results of the participants’ reasons for uncertainty about attitudes towards MAID. From: Views on medical assistance in dying and related arguments: a survey of doctors and nurses at a university hospital

Reasons reported by participants who were undecided about MAID	Doctors (n = 28)	Nurses (n = 18)	Overall (n = 46)
The issue is ethically complex, and I prefer to withhold judgment at present.	24 (86%)	14 (78%)	38 (83%)
There has been insufficient discussion among Icelandic healthcare professionals and/or health authorities.	5 (18%)	12 (67%) <sup>a</sup>	17 (37%)
I have not had sufficient opportunity to become adequately informed about the issue.	2 (7%)	2 (11%)	4 (9%)
I feel there is a lack of clear and meaningful information on the matter.	1 (4%)	2 (11%)	3 (7%)
Other reasons	3 (11%)	1 (6%)	4 (9%)

1. N: number in sample. The results are presented as the number (percentage %) of choices for each option. Participants could choose one or more reasons

2. a: Significantly more nurses chose this answer than doctors did ( $P < 0.05$ )

Multiple selections were permitted, or respondents could write their own explanation under “Other.” The dominant reason, endorsed by 83% of uncertain participants, was that “the topic involves deep moral complexity and

therefore requires more time before reaching a firm conclusion.” This perspective appeared especially strongly among doctors (86%). For nurses, however, the most frequently chosen reason after complexity was

“insufficient discussion on the subject among Icelandic healthcare staff and authorities” (67%), a choice made significantly more often than by doctors (18%) ( $P < 0.05$ ).

The survey found that 61% of all respondents supported at least one form of medical assistance in dying (MAID). Those who endorsed either a properly regulated process (47%) or access via a legal loophole (14%) appear under items b) and c) in **Table 1**. Before the study, the proportion likely to choose the legal loophole option was unknown. It accounted for a notable share of the positive responses—nearly one in four (23%). Perhaps the most striking outcome was the rise in overall backing for MAID, which reached close to a majority for the first time.

#### *Comparison with the 1995 and 2010 surveys with an identical study population*

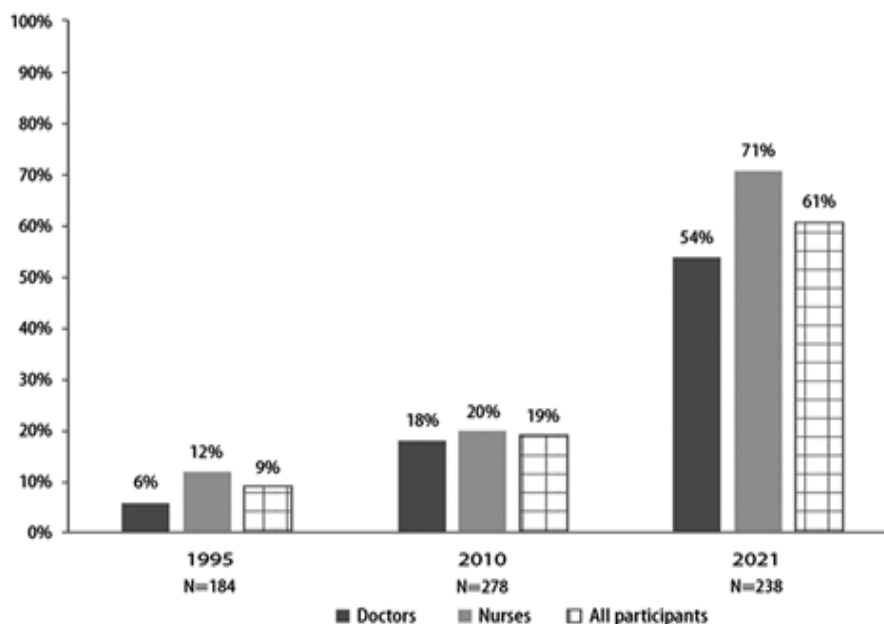
Options b) and c) in **Table 1** were both counted as favorable toward MAID. In each case, respondents viewed medically assisted dying as acceptable under particular conditions. A closely comparable item appeared in the 1995 and 2010 questionnaires: “Does the participant consider it justified under some circumstances to euthanize a mentally capable patient with an incurable disease if he or she requests it?” This earlier phrasing carries essentially the same meaning as the combined content of options b) and c), apart from the extra requirement of “persistent unbearable suffering” added to option b) in the present work. It remains unclear whether that added detail influenced selection rates. The condition narrows eligibility by excluding those without ongoing severe suffering, yet it may also heighten awareness of the patient’s distress, thereby pulling responses in either direction.

A brief look at the role of wording is worthwhile here. In an experimental study conducted on a general population sample in Norway, Magelssen and colleagues tested whether variations in question phrasing altered levels of support for physician-assisted suicide or euthanasia. When the item emphasized abstract concepts, such as “Physician-assisted suicide should be allowed for persons who have terminal illness with short life expectancy,” support was significantly lower (mean 3.78

on a 1–5 Likert scale). In contrast, a more descriptive, context-rich version — “A dying patient is in great pain. To what degree are you in agreement or disagreement with the statement that a doctor, after careful consideration and upon the patient’s request, should be allowed to prescribe a lethal drug dose that the patient can choose to take to avoid great suffering?” — produced a higher mean score of 4.11. The authors noted that the contextual framing creates a more personalized scenario that can stir sympathy while simultaneously highlighting the underlying logic for the choice [22].

When the main MAID question in the current survey is compared with the versions used in 1995 and 2010 (**Table 1**)(option b): “I support MAID following a legitimate and responsible assessment process of the condition of the dying patient who requests it and experiences ongoing unbearable suffering” versus the earlier “Do you consider it justified under some circumstances to euthanise a mentally capable patient with an incurable disease, if he requests it?”), the shift from conceptual to contextual language is present but far less pronounced than in Magelssen *et al.*’s experiment. Both versions in our series retain a contextual element, though the 2021 wording is somewhat more detailed. Whether this modest difference would have produced a meaningful change in support levels (had a Likert scale been used) or altered the categorical outcome observed here cannot be known with certainty. It might have had some influence, yet adopting a broader conceptual focus could have reduced clarity for respondents and raised greater concerns about content validity, such as whether participants fully understood the choices. The added contextual detail in the 2021 version was intended not to heighten emotional appeal but to better reflect the eligibility criteria commonly found in legal frameworks for MAID worldwide. Providing respondents with clearer, better-informed options hardly constitutes bias if the goal is to capture a thoughtful, objective, and well-considered opinion free of misinformation or irrelevant influences.

In 1995, 16 out of 184 participants (9%) answered yes to the comparable question [10]. In 2010, the figure rose to 54 out of 278 (19%) [11]. In the present survey, 146 of 238 participants (61%) responded positively (**Figure 1**).



**Figure 1.** Views on medical assistance in dying and related arguments: a survey of doctors and nurses at a university hospital

Changes in positive attitudes towards medical assistance in dying among doctors and nurses at LIUH. N: number of participants. Results are shown in percentages of doctors (dark), nurses (grey), and total participants (gridded) [11, 12].

Statistically significant differences ( $P < 0.05$ ) emerged when comparing the current positive response rate (61%) with both the 1995 rate (9%) and the 2010 rate (19%). The same held when examining the professions separately: nurses moved from 20% in 2010 to 71% in 2021 ( $p < 0.05$ ), and doctors rose from 18% to 61% ( $P < 0.05$ ).

The overall response rate in this study (27.2%) was considerably lower than in 2010 (48.6%). The decline was driven mainly by a sharp drop among nurses (from 48.4% to 19.9%). In comparison, the decrease among doctors (from 48.9% to 37.9%) aligns with trends reported elsewhere, for example, in an online survey of Canadian physicians that achieved 35% [23]. A 2020 Finnish survey on MAID among physicians recorded an even lower rate of 24% [2]. Response rates among other professional groups have averaged around 44% [24]. In contrast, a 2016 Norwegian survey on euthanasia and PAS among physicians reached 73.1% [25], and a 2020 Swedish study attained 59.2% [3]. The reasons for the substantial 28.5 percentage-point fall in nurse participation at LIUH since 2010 remain unclear. For

context, a 2017–2018 Norwegian survey of clinically active nurses across four hospitals and one home-care district yielded a 28% response rate [26]. Multiple factors may have contributed to the present case, though direct evidence is lacking. One clue appears in **Table 6**: among those who remained undecided, nurses (67%) were significantly more likely than doctors (18%) to cite “a lack of discussion among Icelandic health professionals and/or health authorities” as a reason ( $P < 0.05$ ). This perception may have dampened nurses’ interest, though the explanation remains speculative. The proportion of undecided respondents was similar between nurses (19%) and doctors (21%), so uncertainty itself is unlikely to explain the drop in participation; however, it is impossible to know whether the same balance existed among non-respondents.

Despite the reduced sample size, the study retained enough statistical power to detect clear differences in positive response rates between 2010 and 2021 — rising from 18% to 54% among doctors and from 20% to 71% among nurses [11, 12]. In addition, a significant difference in support levels now exists between the two professions ( $P < 0.05$ ), which had not been observed in 2010 [12].

Beyond the inclusion of the “unbearable suffering” criterion in the main 2021 question, respondents could indicate support for MAID either through a formal legal

process (option b) or via a legal loophole (option c). It seems reasonable to infer that those selecting option c) accept the legitimacy of MAID in certain situations but remain hesitant to endorse it as an official medical practice. Because this loophole possibility was not explicitly offered in the 1995 or 2010 surveys, its inclusion may have created additional room for positive replies. This effect cannot be measured directly. Nevertheless, even when only option b) is counted as a positive answer, a significant increase ( $P < 0.05$ ) remains visible: 42% of doctors and 52% of nurses (overall 47%) compared with 19% in 2010 [12].

In recent Nordic data, Swedish physicians showed a rise in support for legalized PAS from 34.9% in 2007 to 47.1% in 2020 [3]. In Norway, support for euthanasia grew from 17% in 1993 to 25.1% in 2016 (or 30.7% for PAS), though differences in question wording and definitions prevented direct statistical comparison [25]. Finnish physicians displayed virtually no change, moving only from 46% in 2013 to 49% in 2020 [2]. It is impossible to determine whether splitting MAID into the separate categories of PAS and euthanasia (as defined earlier) would have produced different results in our survey. There is no strong reason to expect it would. The definition of MAID was presented clearly upfront, allowing the main question to remain straightforward before later sub-questions addressed the specific modalities equivalent to euthanasia and PAS. This streamlined structure likely enhances the instrument's construct validity. Euthanasia and PAS represent different practical approaches within the broader category of MAID rather than the core ethical issues (such as sanctity of life, autonomy, or dignity) that determine support for or opposition to legalization. It is possible that some participants would have rejected MAID if only direct euthanasia had been offered, because the final act must rest solely with the patient. The survey did not explore this "patient-only" position.

Furthermore, a physician might hold such a view for their own practice yet accept that other colleagues could provide direct assistance. No post-2000 survey identified in the literature has restricted questioning to euthanasia as the sole option. Such a narrow focus would fail to reflect the full range of modalities currently encompassed under MAID.

#### *Reasons for the position on MAID*

The central question and its follow-up items in the survey focused on overall attitudes toward medical assistance in

dying (MAID) and the specific arguments and motivations behind those attitudes. Among supporters, the most frequently selected reasons centered on the patient's experience rather than on the healthcare provider's role (**Table 4**). These included relief of suffering (58%), respect for personal autonomy (56%), and honoring the patient's final wishes (44%). In comparison, reasons linked to the professional as the active agent were chosen less often (act of beneficence: 37%; optional involvement: 28%). A notable difference emerged between professions: nurses selected the statement that dying patients deserve a reliable option for MAID — so they “do not have to feel ashamed or remain in distress because no help is available” — significantly more often than doctors (36% versus 11%,  $p = 0.003$ ). This pattern suggests that, in addition to value-based moral reasoning, nurses showed greater support for empathy-driven ethical considerations than doctors did. Apart from this difference, the distribution of reasons was largely similar across the two professional groups. The official annual report from Oregon on MAID, covering the period from 1998 to 2021 ( $n = 2159$ ), listed the three most common reasons chosen by individuals who used the service: loss of autonomy (90.9%), inability to engage in activities that bring enjoyment to life (90.2%), and loss of dignity (73.0%) [27]. These patient-centered motivations closely mirror the reasons healthcare professionals who supported MAID emphasized in the present survey.

In contrast, the arguments provided by those who opposed MAID in any form primarily concerned the responsibilities and core principles of the healthcare system and the professions involved (**Table 3**). The most widely endorsed reason was that healthcare workers can best assist patients facing existential distress by offering “the best available palliative care” (70%). Another frequently chosen argument was that “killing is incompatible with the fundamental aims of medicine and nursing” (60%). A smaller portion of this group (9%) explicitly referred to the principle of sanctity of life. Doctors were more likely than nurses to highlight the risk that individuals might feel pressured to request assisted dying because of difficult personal circumstances or external expectations from family or society (64% versus 30%,  $P = 0.06$ ) (**Table 3**). According to the same Oregon report, 48.3% of service users indicated that being a burden on family, friends, or caregivers was a contributing factor in their decision to use services. This figure suggests that, in nearly half the cases, patients

sought not only control over the timing and location of death (92.8% died at home) but also wished to spare their loved ones from additional strain [27]. This concern aligns with the slippery-slope argument, which doctors in our survey emphasized more strongly than nurses, a finding that remains unclear. Nurses, by comparison, placed significantly greater weight on the view that MAID should never become a patient right or a professional duty within the healthcare system (70% versus 33% for doctors,  $P = 0.04$ ).

#### *Implementations of assisted dying practices*

When asked about the appropriate health status of a patient requesting MAID (**Table 5**), participants were almost evenly divided. Slightly more than half (54%) believed MAID should be restricted to dying patients. In comparison, 46% felt it should also be available to chronically ill individuals experiencing unbearable suffering who are not terminally ill. This split reveals a degree of openness toward broader eligibility criteria, similar to the more expansive legislation found in the Benelux countries [28]. Such liberality was unexpected, given the very low support for MAID recorded in the 2010 survey of the same population.

On the other hand, doctors showed near-unanimous agreement (98%) that participation in MAID must remain entirely optional. This stance likely reflects awareness that some physicians would decline to take part for ethical reasons. In all jurisdictions worldwide where MAID has been legalized, doctors are not required to participate, suggesting this position is widely shared among supporters [28, 29].

Regarding the method of administering lethal medication, doctors and nurses expressed similar preferences (47% and 43%, respectively, for a total of 45%). The most common view was that a physician should be permitted either to perform euthanasia directly or to provide a prescription for self-administration, rather than limiting the practice to only one method (direct: 14%, indirect: 20%) (**Table 5**). This result indicates a clear preference for flexibility. Notably, this was the only question where a substantial number of participants (22%) chose the “Other” category to write their own comments. About one-third of these open responses expressed uncertainty about the best approach, and nearly another third suggested that nurses could also serve as administrators. A variety of additional ideas were offered (detailed in the Results section). The range of opinions and uncertainty highlights the value of conducting further

research with a more comprehensive set of standardized response options to better map views of implementation.

#### *Difference in support of attitudes depending on age and specialization*

Some variation in responses was observed depending on whether participants held specialist qualifications. Specialist doctors showed the largest share of individuals who rejected MAID entirely (**Table 1**). This pattern corresponds with the findings by age group, where those aged 60 and older differed markedly from the two younger brackets. Multiple other investigations on this topic have similarly found that older individuals tend to express lower support for MAID than younger ones [2, 3, 29]. It is conceivable that the views of older, more experienced professionals were formed during an earlier period when discussions around the issue followed a different dominant perspective, or that the topic of “euthanasia” received limited attention during their formative years. Their extensive clinical background may also have led them to avoid favoring MAID in general. These explanations cannot be confirmed from the present data. Nevertheless, the broader moral climate in Western societies appears to shift with each successive generation toward greater liberalism and what Tom L. Beauchamp has described as the “triumph of autonomy” [30].

#### *Strengths and limitations*

Key strengths of this study include the repeated surveying of the same professional population three times across 26 years, all conducted at a single institution — Iceland’s largest hospital by a wide margin. This consistency offers dependable insight into how attitudes toward MAID have evolved within this significant group. Another advantage is the simultaneous collection of data from both nurses and physicians, enabling a direct and uncommon comparison between these two central healthcare professions within a single investigation. Additional strengths involve the neutral framing of questionnaire items and the inclusion of space for participants to express views not covered by preset choices. When exploring reasons behind attitudes, care was taken to maintain impartiality by offering balanced response options that captured the primary arguments both for and against MAID, drawn from scholarly publications and public discussions. Most questions also included an “Other” field, allowing respondents to describe their position freely if none of the listed

alternatives matched their thinking. This approach helped mitigate the limitation that fixed options can never encompass every individual perspective on ethical matters. At the same time, standardized responses were essential for quantitative analysis. The open-text option was used sparingly overall, except for the sub-question on the method of MAID delivery (22%) (Table 5). This may suggest that the provided choices were generally sufficient, or it could reflect constraints such as time pressure or other unmeasured factors. It is also worth noting that participation relied on voluntary response without external influence. The research team was not aware of any interest groups or pressures that might have affected respondents. One potential concern is whether the age distribution among respondents (Table 2) differed substantially from that of the full target population, which could introduce bias. Since age data for the entire study group were unavailable, it is impossible to determine whether the responding sample was representative or skewed. However, the proportions observed across the three age categories did not show any striking or implausible deviations from the known demographic reality at LIUH, where each of the two younger groups is substantially larger than the group aged 60 years or older.

The statistical power ( $1 - \beta$ ) of the sample proved adequate for comparisons with the 2010 (and 1995) surveys, given the substantial increase in positive responses to MAID — whether through legalization or a legal loophole — from 20% in 2010 to 61% in the current study. A sample of only 56 participants would have been sufficient to detect this difference with 90% power and  $\alpha = 0.05$ , yet the actual sample size reached 238.

The relatively modest overall response rate (27%) yielded a 95% confidence interval for the main positive response of  $\pm 6.2\%$ , which is somewhat wider than the ideal of  $\pm 5\%$  or less [31] but still falls comfortably within the commonly accepted range of 4%–8%. When examined separately by profession, the margins were  $\pm 8.4\%$  for doctors and  $\pm 8.8\%$  for nurses, reducing precision at the subgroup level. The study was not designed to produce highly exact point estimates; its goal was to establish reliable indications of the level of support for each position and its associated arguments. In several instances, differences between subgroups approached but did not reach conventional statistical significance ( $P = 0.06$ – $0.10$ ). With smaller numbers in these subgroups, the risk of type II error ( $\beta$ ) is correspondingly higher.

As noted earlier in the Study population and composition section, deliberate steps were taken to safeguard content validity and construct validity. No participant raised concerns about unclear wording or structure either during or after the survey period. The change in phrasing of the main MAID question between 1995/2010 and 2021 was modest, as both versions adopted a contextual approach. No pilot testing or test-retest reliability assessments were performed to evaluate the questionnaire [32]. Given that the survey did not aim to detect subtle variations in conceptual understanding or to measure graded attitudes on a scale, such preliminary testing was not considered essential. However, it could have offered additional confirmation. It is impossible to rule out some influence on the results. Still, considering the precautions taken, the straightforward nature of the response options, and the high educational level of the participating professionals, any such effect is considered unlikely.

#### *Main findings and possible next steps*

This investigation documented a clear, statistically significant rise in favorable attitudes toward MAID among doctors and nurses working in surgical, medical, and most other clinical departments at LIUH over the past decade. While the findings cannot be generalized to every doctor and nurse across Iceland, LIUH remains by far the country's largest employer in these fields. Support for MAID expanded from roughly one-fifth of the study population in 2010 to three-fifths in 2021 ( $\pm 6.2\%$ ). Beyond tracking this shift, the results shed light on the underlying perspectives and recurring arguments that shape differing stances on MAID. In an ethically intricate matter such as this, the findings may help establish firmer reference points for ongoing discussions and bring greater focus to the debate. When the two professions are compared, the reasons offered in support of MAID show considerable overlap in frequency, whereas certain opposing arguments diverge. This misalignment raises intriguing questions for future research about the causes and mechanisms behind these differences. Possible next steps include extending the survey to all registered doctors and nurses nationwide and benchmarking the results against comparable international studies. There is also a clear need for more global research examining the ethical foundations of support for, opposition to, or uncertainty about MAID, to develop a broader understanding of the moral landscape.

MAID constitutes a challenging ethical issue that requires careful balancing of fundamental human values.

It is therefore essential that public and professional discourse on the topic continues to rest on accurate information and proceeds in a reasoned, philosophical spirit.

### Conclusion

Relative to prior questionnaires, this investigation documented a marked increase in supportive attitudes toward MAID across the sampled healthcare workforce. Participant responses illuminated the core factors shaping their positions, notably the balance between honoring patient dignity and personal choice on one side and the professional responsibility to avoid ending life or to focus exclusively on comfort measures on the other, along with observable variations by professional role.

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### References

- Materstvedt LJ, Clark D, Ellershaw J, Førde R, Gravgaard AMB, Müller-Busch HC, et al. Euthanasia and physician-associated suicide: a view from an EAPC Ethics Task Force. *Palliat Med.* 2003;17:2. doi:10.1191/0269216303pm673oa
- Piili RP, Louhiala P, Vänskä J, Lehto JT. Ambivalence toward euthanasia and physician-assisted suicide has decreased among physicians in Finland. *BMC Med Ethics.* 2022;23:71. doi:10.1186/s12910-022-00810-y
- Lynøe N, Lindblad A, Engström I, Sandlund M, Juth N. Trends in Swedish physicians' attitudes towards physician-assisted suicide: a cross-sectional study. *BMC Med Ethics.* 2021;22:86. doi:10.1186/s12910-021-00652-0
- Mroz S, Dierickx S, Deliens L, Cohen J, Chambaere K. Assisted dying around the world: a status questionnaire. *Ann Palliat Med.* 2021;10:3540–53. doi:10.21037/apm-20-637
- Wiesing U. The judgment of the German Federal Constitutional Court regarding assisted suicide: a template for pluralistic states? *J Med Ethics.* 2022;48:542–6. doi:10.1136/medethics-2021-107233
- Grosse C, Grosse A. Assisted suicide: models of legal regulation in selected European countries and the case law of the European Court of Human Rights. *Med Sci Law.* 2015;55(4):246–58. doi:10.1177/0025802414540636
- Austrian Constitutional Court. It is unconstitutional to ban any form of assistance of suicide without exception [Internet]. 2020. Available from: [https://www.vfgh.gv.at/medien/Toetung\\_auf\\_Verlangen\\_Mithilfe\\_am\\_Suizid.php](https://www.vfgh.gv.at/medien/Toetung_auf_Verlangen_Mithilfe_am_Suizid.php) (accessed 2024 Mar 9)
- Landry JT, Foreman T, Kekewich M. Ethical considerations in the regulation of euthanasia and physician-assisted death in Canada. *Health Policy.* 2015;119:1490–8. doi:10.1016/j.healthpol.2015.10.002
- Alþingi (Parliament of Iceland). Lög um réttindi sjúklinga (legislation on patients' rights) [Internet]. 1997. Available from: <https://www.althingi.is/lagasafn/pdf/152b/1997074.pdf> (accessed 2023 Dec 12)
- Alþingi (Parliament of Iceland). Almenn hegningarlög (common penal code) [Internet]. 1940. Available from: <https://www.althingi.is/lagasafn/pdf/152b/2007040.pdf> (accessed 2023 Dec 12)
- Valsdóttir EB, Jónsson PV, Árnason V, Helgadóttir H. Views of Icelandic physicians and nurses towards limitation of treatment at the end of life. *Læknabladid.* 1997;83:92–101.
- Hauksdóttir H, Valsdóttir EB, Helgadóttir H, Jónsson PV, Árnason V. Ethical aspects of limitation of treatment at end of life [Internet]. 2010. Available

- from: <http://hdl.handle.net/1946/45796> (accessed 2023 Oct 9)
13. Siðmennt (Icelandic Ethical Humanist Association). Life stances and religious views of Icelanders [Internet]. 2015. Available from: <https://www.sidmennt.is/um-sidmennt/frettir/life-stances-and-religious-views-of-icelanders/> (accessed 2023 Dec 12)
  14. Haraldsdóttir B, Friðriksson HK, Valdimarsson JS. Proposal for a parliamentary resolution on euthanasia [Internet]. Alþingi; 2017. Available from: <https://www.althingi.is/altext/146/s/0530.html> (accessed 2023 Dec 12)
  15. Haraldsdóttir B, Sverrisdóttir H, Ævarsdóttir ÞS, Sigurgeirsdóttir LR, Friðriksson HK, Gunnarsson BL, et al. Proposal for a parliamentary resolution on euthanasia [Internet]. Alþingi; 2023. Available from: <https://www.althingi.is/altext/154/s/0592.html> (accessed 2023 Dec 12)
  16. Steingrímisdóttir JS, Einarsson G, Friðriksson HK, Guðmundsson S, Gunnarsdóttir ÞK. Legislation proposal on medical assistance in dying [Internet]. Alþingi; 2024. Available from: <https://www.althingi.is/altext/154/s/1168.html> (accessed 2024 Mar 11)
  17. Iceland Ministry of Health. Medical assistance in dying – health care professionals [Internet]. 2023. Available from: [www.althingi.is/altext/pdf/153/fylgiskjol/s2061-f\\_II.pdf](http://www.althingi.is/altext/pdf/153/fylgiskjol/s2061-f_II.pdf) (accessed 2023 Dec 12)
  18. Douglas H. Etymology of euthanasia. In: Online Etymology Dictionary [Internet]. 2017. Available from: <https://www.etymonline.com/word/euthanasia> (accessed 2023 Sep 14)
  19. Beauchamp TL. Justifying physician-assisted deaths. In: LaFollette H, editor. *Ethics in practice: an anthology*. Hoboken (NJ): Wiley Blackwell; 2014. p. 85–91.
  20. Velleman DJ. Against the right to die. In: LaFollette H, editor. *Ethics in practice: an anthology*. Hoboken (NJ): Wiley Blackwell; 2014. p. 92–100.
  21. Landspítali Iceland University Hospital. Landspítali – hospital statistics and accounts 2021 [Internet]. 2021. Available from: <https://www.landspitali.is> (accessed 2023 Dec 12)
  22. Magelssen M, Supphellen M, Nortvedt P, Materstvedt LJ. Attitudes towards assisted dying are influenced by question wording and order: a survey experiment. *BMC Med Ethics*. 2016;17:24. doi:10.1186/s12910-016-0107-3
  23. Cunningham CT, Quan H, Hemmelgarn B, Noseworthy T, Beck CA, Dixon E, et al. Exploring physician specialist response rates to web-based surveys. *BMC Med Res Methodol*. 2015;15:32. doi:10.1186/s12874-015-0016-z
  24. Wu MJ, Zhao K, Fils-Aime F. Response rates of online surveys in published research: a meta-analysis. *Comput Hum Behav Rep*. 2022;7:100206. doi:10.1016/j.chbr.2022.100206
  25. Gaasø OM, Rø KI, Bringedal B, Magelssen M. Doctors' attitudes to assisted dying. *Tidsskr Nor Lægeforen*. 2019;139.
  26. Hol H, Vatne S, Orøy A, Rokstad AMM, Opdal Ø. Norwegian nurses' attitudes toward assisted dying: a cross-sectional study. *Nurs Res Rev*. 2022;12:101–9. doi:10.2147/NRR.S363670
  27. Oregon Health Authority. Oregon death with dignity act 2021 data summary [Internet]. 2022. Available from: <https://www.oregon.gov/oha> (accessed 2023 Dec 12)
  28. Government of the Netherlands. Euthanasia, assisted suicide and non-resuscitation on request [Internet]. Available from: <https://www.government.nl/topics/euthanasia> (accessed 2023 Sep 14)
  29. Young J, Egan R, Walker S, Graham-DeMello A, Jackson C. The euthanasia debate: synthesising the evidence on New Zealander's attitudes. *Kōtuitui*. 2019;14(1):1–21. doi:10.1080/1177083x.2018.1532915
  30. Beauchamp TL. The right to die as the triumph of autonomy. *J Med Philos*. 2006;31:643–54. doi:10.1080/03605310601096619
  31. Bartlett JE, Kotrlik JW, Higgins CC. Organizational research: determining appropriate sample size in survey research. *Inf Technol Learn Perform J*. 2001;19(1):43–50.
  32. Boynton PM, Greenhalgh T. Selecting, designing, and developing your questionnaire. *BMJ*. 2004;328(7451):1312–5. doi:10.1136/bmj.328.7451.1312