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Is "terminally ill self-killing" suicide?

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Abstract
When a terminally ill patient kills herself, using a drug prescribed by a physician for this purpose, in bioethical literature this would be described as a case of physician-assisted suicide. This would also be a case of suicide according to the standard account of suicide in the philosophical literature. However, in recent years, some authors have argued that terminally ill self-killing in fact should not be considered suicide. In this paper, we don't try to address the philosophical merits of such arguments. Instead, we ask whether these considerations align with the way non-philosophers think about suicide. We present empirical evidence from four studies that address different concerns raised about terminally ill self-killing being a suicide. We conclude that the raised concerns cannot be supported by the folk understanding of suicide.

Keywords: end of life; assisted dying, aid in dying, physician-assisted suicide, terminally ill self-killing

Introduction

Consider John. John is a middle-aged businessman. He was successful at his job, but he gets bankrupt due to a series of unfortunate decisions. John is so ashamed of himself that he finds it unbearable, shoots himself in the head, and dies. This seems to be a clear case of suicide.

Now consider Nancy. She is a bookkeeper in a large company. Lately, she has been under considerable stress due to problems in her personal life and, moreover, her workload in the company has increased. After a long and tiring day at her office, Nancy returns home, but on her way, she is hit by a car and dies. This case looks like an accident (as long as we don't have any further information about Nancy's or the car driver's intentions).

Further, consider Jim. Jim is a soldier on the frontline. He sees that the enemy has tossed a grenade into his foxhole. Jim knows that the detonation of the grenade will kill all other

members of his unit there. To avoid this outcome Jim jumps on the grenade to absorb the blast. The explosion kills Jim.

Has Jim died due to suicide? Here people might disagree on how to answer this question as do the philosophers writing on suicide. Some authors [1] would claim that Jim's action is not suicide, but others [2, 3] would argue that it is. According to what some authors call the standard account of suicide [4, 5], an act is a suicide if and only if it satisfies the following three conditions:

> An agent, in carrying out the act,
>
> (a) causes her own death,
>
> (b) (at least roughly) foresees, how the act will cause her death,
>
> (c) intends her own death, i.e., performs the act in order to die.

The disagreements about Jim's case stem either from different interpretations of (c) or from doubts about the necessity of (c) for an adequate account of suicide [3]. Of course, one should not wonder about there being borderline cases for the application of a concept as there is nothing unusual about that. However, in the case of suicide, there are several arguments in the literature that attempt to legislate how the label "suicide" should apply in borderline cases. One such example is physician-assisted suicide (PAS), sometimes referred to also as "aid in dying" or "assisted dying." Recently, several authors have advanced the view, that PAS is in fact misleading label because PAS should not be classified as suicide. Before exploring their reasons for the claim let's take a look at a real-life example of PAS – the death of Peter Smedley as it is documented in the 2011 documentary "Terry Pratchett: Choosing to Die".[1] Smedley is a 71-year-old UK citizen who suffers from motor neurone disease. As he does not want to wait till the point where his disease will make him incapacitated and, in the end, will cause his death, he decides to go to Switzerland, where assisted suicide is not illegal. He arranged it via a Swiss not-for-profit association *Dignitas*.[2] After two meetings with a doctor hired by *Dignitas*, who evaluates Smedley's condition, Smedley gets the green light to proceed. He arrives with his wife at the house rented by *Dignitas* in the industrial area of Zurich, where they are met by two *Dignitas* "escorts" – Erika and Horst. After all the paperwork, Smedley takes the first drug – an antiemetic, that is used to prevent nausea or vomiting from a barbiturate that should be taken about an hour later. After some time *Dignitas* "escort" Erika offers him a glass with a prepared barbiturate. Before giving the glass to Smedley, she asks him several times whether he is sure that he wants to drink the medicine, which will cause his death. Smedley confirms, drinks the potion and then within a few minutes falls asleep and dies.

Now if we look back to the standard account of suicide, it seems that Smedley's action fits the requirements and is not that different from our fictional case of John. Smedley certainly (a) causes his own death as he drinks the substance that kills him. Also, (b) he is certainly aware of how his drinking the barbiturate will cause his death. And, finally, it seems quite uncontroversial that (c) he drinks the barbiturate in order to die. Sure, Smedley's case is not the prototypical example of suicide (John's example is much closer to that) but it looks like a

[1] https://www.imdb.com/title/tt1929387/

[2] For more information see http://www.dignitas.ch/?lang=en

suicide nonetheless. And in bioethical literature it would be described as an example of physician-assisted suicide [6-8]. Why would anybody then deny that this is a suicide?

The authors who claim that PAS is not suicide have advanced several considerations to support their view. For example, Margaret Pabst Battin [9] has argued that PAS only seems to be suicide because we focus on the wrong aspects of the practice. She points out that PAS looks like suicide if we focus on what she calls "the mechanics of physical causation" – the hand lifting the glass to the mouth and then drinking the lethal liquid. However, things are different if we "focus on the intention under which the patient acts, to protect oneself from a worse fate, to be able to preserve one's cognitive capacities, to bring a life to a bearable close in the presence of those one loves. Seen in this way, it isn't suicide at all." Battin's claim seems to be that PAS is not suicide because the patient's intention is not to die as that is something they don't want. What they intend instead is to avoid a more difficult process of dying.

A rather different consideration is provided by Arthur Caplan [10]. Writing of California legislation, he points out that: "It permits only those who are terminally ill, with less than six months to live, to ask for a lethal drug dose. It is hard to see how hastening the inevitable is strictly comparable to suicide." Therefore, according to Caplan, as soon as a patient's condition is terminal, the patient just hastens their death and, strictly speaking, this is not a suicide.

A more elaborate account along similar lines is provided by Joseph Kupfer [11]. He writes:

> "Imagine someone who is terminally ill and ends her life. Perhaps to spare loved ones or herself a couple of weeks of suffering - it doesn't really matter. What matters is that she has no control over whether she will die soon, only how soon and how. Similar considerations hold for people on death row. They are simply carrying out the will of the state themselves, hastening their end by doing so. We do better to call this auto-euthanasia or "hastening the end." They have not chosen to die in the sense that there are other "live" options. It's rather that dying now is preferable to dying soon. In order for an act to be a suicide, then, the agent must have the option of a rather indeterminate period of life" (p. 68).

Therefore, according to Kupfer, for an action to qualify as suicide, it should satisfy an additional necessary condition - there must be an option for the agent to live an indeterminate period of life. If such an option is absent, then that is not suicide.

In this paper, we will not engage with these objections directly, i.e., we will not attempt to find holes in the arguments.[3] Instead, we would like to explore a different but related question. Namely, whether the objections mentioned above align with how non-philosophers think about suicide. This, we believe, is relevant for the evaluation of philosophical theories of suicide. We will briefly discuss this relevance at the end of the paper.

To address this question, we conducted four vignette-based studies. Study 1 explores how suicide ascriptions are affected by the conditions included in the standard account of suicide. Study 2 asks whether temporal closeness of inevitable death results in reduced suicide ascriptions. Study 3 is designed to test whether PAS is still considered to be a suicide when the

[3] In this regard, we find ourselves in agreement with the treatment of this issue given by Philip Reed [3].

agent does not want to die and just wants to avoid being in a worse condition. Finally, Study 4 compares ascriptions of suicide in cases with different kinds of third-party involvement.

To recognise the fact that PAS is not a typical example of suicide and avoid begging the question from now on in the paper we will refer to such cases by the acronym TISK which we have borrowed from Reed [3], which stands for "terminally ill self-killing". So now we can ask why anybody would deny that TISK is suicide?

Study 1. Intention, foreseeability, action

According to the standard philosophical account of suicide, a person commits suicide if they cause their own death, they foresee that their action will bring their death about and, finally, they perform the action in order to die. In our first study, we wanted to explore, how these conditions shape suicide ascriptions for TISK. In medical contexts, especially in countries where TISK is not legal, patients might attempt to end their lives by refusing to receive life-saving treatment (e.g., resuscitation, food). In those cases, the patient ends her life not by action but by omission. Therefore, we included action/omission too as a variable in our study.

Participants. 80 study participants were recruited for this study. Here, as in other studies reported in this paper, participants were recruited on *Prolific* and they were US or UK nationals who indicated English as their first language, M_{age} = 33.0, SD_{age} = 10.0, age range 19-64, 70% female, 30% male.

Materials. Each study participant received six short vignettes in a randomized order. The vignettes differed in terms of intention, foreseeability and whether the effect resulted from an action or an omission. Here is the basic scenario where all three elements are present (*Action Foreseen Intended*):

> Mary is terminally ill. Her illness causes her considerable mental and physical suffering. She prefers not to continue to live in this condition. She prefers to die. One day, her condition suddenly worsens. She has a pill X, and she knows that by taking the pill, she will die. Mary takes the pill, and within one hour, she dies.

The following differences were introduced to reflect the three manipulated variables (in addition to changing the name of the character): *Action* ('by taking the pill, she will die. [Name] takes the pill') vs. *Omission* ('by not taking the pill, she will die. [Name] does not take the pill'); *Foreseen* ('and she knows that by [not] taking the pill, she will die') vs. *Unforeseen* ('but she does not know what it does. She does not know whether, by [not] taking the pill, she will die or get better.'); and *Intended* ('She prefers not to continue to live in this condition. She prefers to die') vs. *Unintended* ('She, however, prefers to continue to live in this condition. She prefers not to die'). Two combinations in which foreseeability is present while intention is absent were considered conceptually incoherent and thus were not included in the study.

After reading each vignette, study participants were asked whether the following three claims are true or false (according to the scenario): '[Name] took the pill.'; '[Name] knew that by taking the pill, she would die.', and '[Name] preferred to die.' If at least one of the claims was assessed incorrectly, responses for a given vignette were discarded.

For each vignette, study participants indicated, on the scale from 1 to 7 (1 = strongly disagree, ..., 4 = neither agree nor disagree, ..., 7 = strongly agree), whether they agree or disagree with the following four statements (presented in randomized order):

> [Name] has committed suicide.
> [Name] has killed herself.
> [Name] caused her own death.
> [Name] is morally blameworthy for what she did.

Ascription of suicide was the target measure while the other three were included for exploratory purposes.

Results. 11% of responses were discarded for failing at least one comprehension check.

Median scores for all ascriptions are presented in Table 1. As can be seen in Figure 1, the only vignette for which there was a clear ascription of suicide (*Mdn* = 7, modal response 7 ('strongly agree') selected by 66% of participants) is the vignette in which all three elements - action, intention, and foreseeability - are present. For all three *Unintended* vignettes, participants strongly rejected the ascription of suicide (*Mdn* = 1). A more complicated pattern can be observed for the two remaining *Intended* vignettes, where many study participants ascribe suicide while many others deny it, namely *Omission Foreseen Intended* (*Mdn* = 5) and *Action Unforeseen Intended* (*Mdn* = 3).

A series of one-sample Wilcoxon tests against the middle of the scale (4) indicated that study participants clearly ascribed suicide only in *Action Foreseen Intended* vignette (V_{Wilcoxon} = 2535.0, $p < .001$, $r_{\text{rb}} = .88$, $n_{\text{obs}} = 76$). In the remaining five vignettes, either ascriptions did not differ from the middle of the scale (*Omission Foreseen Intended*, $V_{\text{Wilcoxon}} = 706.5$, $p = .682$, $r_{\text{rb}} = .07$, $n_{\text{obs}} = 58$) or were below the middle of the scale (*Action Unforeseen Intended*, $V_{\text{Wilcoxon}} = 512.0$, $p = .003$, $r_{\text{rb}} = -.44$, $n_{\text{obs}} = 73$; *Omission Unforeseen Intended*, $V_{\text{Wilcoxon}} = 157.0$, $p < .001$, $r_{\text{rb}} = -.87$, $n_{\text{obs}} = 71$; *Action Unforeseen Unintended*, $V_{\text{Wilcoxon}} = 95.5.0$, $p < .001$, $r_{\text{rb}} = -.92$, $n_{\text{obs}} = 78$; *Action Unforeseen Intended*, $V_{\text{Wilcoxon}} = 91.0$, $p < .001$, $r_{\text{rb}} = -.93$, $n_{\text{obs}} = 72$). A series of Wilcoxon tests for paired samples suggest that study participants were more inclined to attribute suicide in *Action Foreseen Intended* condition than in every other condition (all *p*s < .001, r_{rb} ranging from .97 to 1).

Strong positive correlations were observed between ascriptions of suicide and ascriptions of killing oneself for all six vignettes (r_s range from .56 to .87, all *p*s < .001), as well as between ascriptions of suicide and ascriptions of causing one's own death (r_s range from .55 to .73, all *p*s < .001; except *Action Unforeseen Unintended*, where moderate strength correlation was observed, $r_s = .32$, $p = .004$).

Discussion. All three conceptual elements (intention, foreseeability, and action) seem to be required for the ascription of suicide. While a sizeable minority of study participants still ascribed suicide when either action was changed into omission or foreseeability was removed, such modifications of the vignette very noticeably reduce the ascriptions of suicide. These results suggest that the folk concept of suicide tends to align with what was called the standard account of suicide.

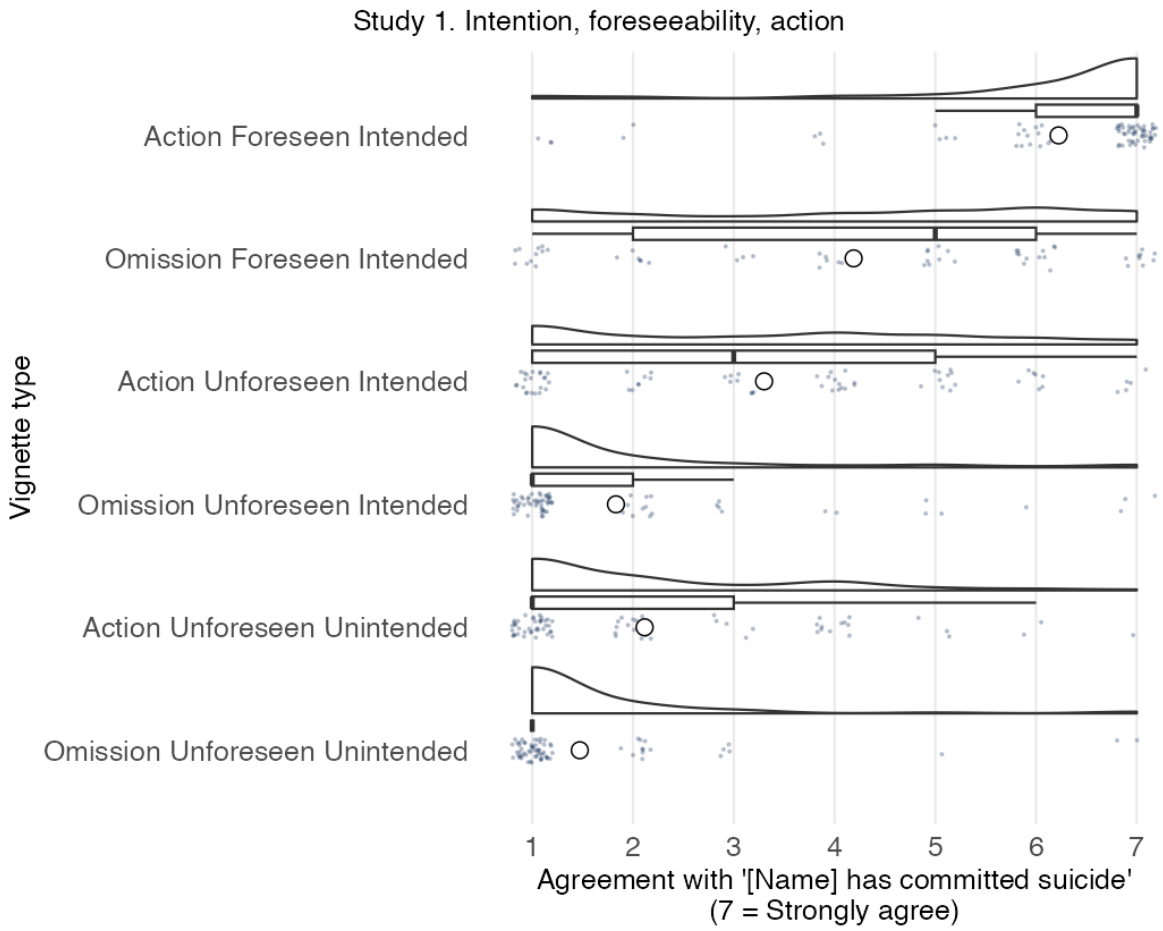

Figure 1. Agreement with '[Name] has committed suicide' in Study 1. Responses are on the scale from 1 to 7, where 1 means 'Strongly disagree' and 7 means 'Strongly agree'.

	Measure			
Vignette	Suicide	Killing	Cause	Blame
Action Foreseen Intended	7	7	7	3
Omission Foreseen Intended	5	5	5	1
Action Unforeseen Intended	3	4	4	2
Omission Unforeseen Intended	1	1	1	1
Action Unforeseen Unintended	1	3	4	1
Omission Unforeseen Unintended	1	1	1	1

Table 1. Median scores for all ascriptions in Study 1.

Study 2. Temporal distance

Amongst other things, Study 1 also indicates that (contra Caplan and Kupfer) study participants consider an action suicide even if the person killing herself is terminally ill, i.e., the inevitability of death from other causes does not preclude the action being described as suicide. However, Kupfer's claim that for an action to be counted as suicide there must be an option for the agent to live an indeterminate period of life can be interpreted as a claim, that it is not just unavoidability of death is what matters (in this regard we all are in the same boat anyway), but

how far in time agent's death is determined to happen. If death is considerably far away, then the agent's killing of herself (provided all other things are equal) is suicide. However, if the inevitable death is temporally very close, then, according to Kupfer, killing herself is not suicide anymore. Our Study 2 was designed to test this claim.

Participants. 211 study participants were recruited for this study, M_{age} = 36.1, SD_{age} = 12.7, age range 18-78, 50% female, 49% male, 1% non-binary.

Materials. For Study 2, we took *Action Foreseen Intended* vignette from Study 1 and added a sentence indicating life expectancy. There were three versions of the vignette differing in life expectancy, presented in a between-subjects design (differences between vignettes in the brackets):

> Mary is terminally ill. Doctors tell her that patients in her condition have a life expectancy of [one year / two weeks / two days].[4] Her illness causes her considerable mental and physical suffering. She prefers not to continue to live in this condition. She prefers to die. She has a pill X and she knows that by taking the pill she will die. Mary takes the pill and within one hour she dies.

As a comprehension check, study participants had to correctly indicate life expectancy. Then study participants indicated, on the scale from 1 to 7 (1 = completely disagree, ..., 4 = neither agree nor disagree, ..., 7 = completely agree), whether they agree or disagree with the following four statements (presented in randomized order):

> Mary has committed suicide.
> Mary killed herself.
> Mary caused her own death.
> Mary is morally blameworthy for what she did.

Results. All participants correctly identified life expectancy. Median scores for all ascriptions are presented in Table 2. In all three vignettes, there was a clear ascription of suicide (*Mdn* = 7), with more than half of the participants (51%-64%, depending on condition) choosing 7 (Completely agree), see Figure 2a. Kruskal-Wallis test did not detect statistically significant differences between the conditions, $H(2) = 2.88$, $p = .236$. Overall, ascriptions of suicide were above the middle of the scale, $V_{Wilcoxon} = 18216.5$, $p < .001$, $r_{rb} = .87$, $n_{obs} = 211$.

A strong positive correlation was observed between ascriptions of suicide and ascriptions of killing oneself ($r_s = .73$, $p < .001$). Ascriptions of suicide were also moderately positively correlated with ascriptions of causing one's own death ($r_s = .40$, $p < .001$).

	Measure			
Vignette	Suicide	Killing	Cause	Blame
Two days	7	6	5	1.5
Two weeks	7	6	6	1
One year	7	7	6	2

Table 2. Median scores for all ascriptions in Study 2.

[4] We are aware that this timeline for life expectancy is medically unreasonable. It allows us, however, to highlight the inevitability of death.

Discussion. No effect of temporal distance to unavoidable death on ascriptions of suicide was observed. In all three cases, relatively clear ascriptions of suicide were observed. Therefore, it seems that our study participants did not share the view that temporal distance to inevitable death affects our suicide ascriptions. It cannot be ruled out, of course, that there might be some effect if we would provide a wider set of options for life expectancy. However, the fact that even in such short timeframes as "two days" and "two weeks" the suicide ascriptions are very high seems to be enough to conclude that if a person kills herself in a situation where her inevitable death is close in time it is still considered a suicide. If Kupfer's position implies that it is not a suicide, then he goes against the folk view.

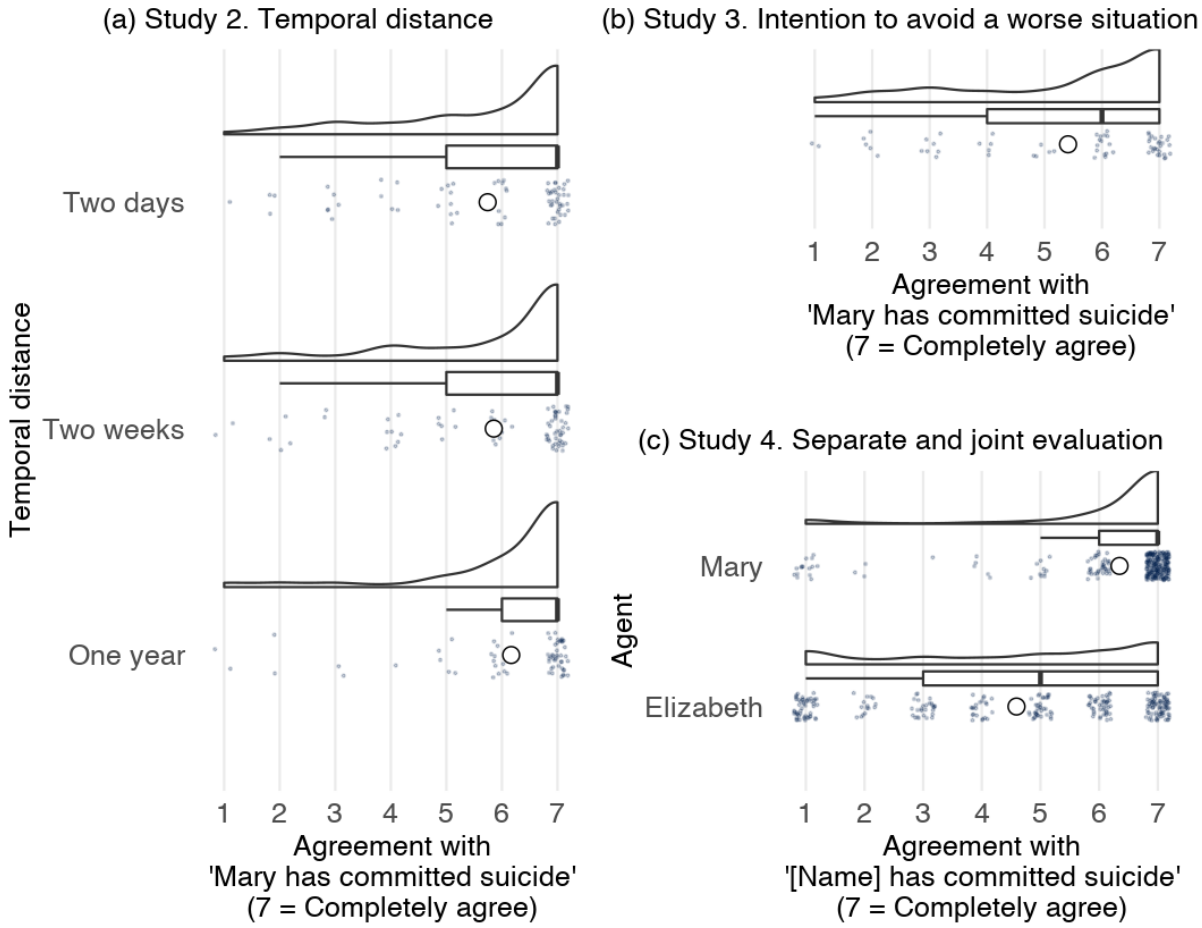

Figure 2. Agreement with '[Name] has committed suicide' in Studies 2-4. Responses are on the scale from 1 to 7, where 1 means 'Completely disagree' and 7 means 'Completely agree'.

Study 3. Intention to avoid a worse situation

Battin claims that in describing the cases of TISK as suicide we make a mistake because we focus on "the mechanics of physical causation". If we would take into account the agent's intention which is not in fact to die but rather to protect oneself from a worse fate, then we would correctly see that TISK is not suicide. Our third study was designed to check whether

non-philosophers would agree with Battin on this. To do that we used the vignette from Study 2 and changed it in the following way. First, we made it explicit that the agent does not want to die, and second, we specified the agent's intention by making it clear that the agent takes the lethal pill in order to avoid the worsening of her condition.

Participants. Ninety study participants were recruited for this study. Twenty-four failed at least one comprehension question, resulting in $n = 66$, $M_{age} = 37.5$, $SD_{age} = 14.0$, age range 18-78, 55% female, 44% male, 2% non-binary.

Materials. Study participants received the following vignette:

> Mary is terminally ill. Her illness causes her considerable mental and physical suffering. The suffering is almost unbearable. She does not want to die, but she knows her condition will worsen significantly within the next few months. She has a pill X, and she knows that by taking the pill, she will die. She takes the pill to avoid worsening her condition, but she also knows this will cause her death.

After reading the vignette, study participants indicated on a scale from 1 (Completely disagree) to 7 (Completely agree) whether they agree or disagree with the following claim:

> 'Mary has committed suicide.'

Furthermore, as a comprehension check, study participants had to indicate whether each of the following four claims is true or false according to the scenario:

> 'Mary took the pill.'
> 'Mary knew that by taking the pill, she would die.'
> 'Mary wanted to die.'
> 'Mary wanted to avoid the worsening of her condition.'

Results. Twenty-four participants failed at least one of the comprehension checks and thus were removed from further analysis. Median response for ascription of suicide was 6, with modal response 7 (Completely agree) selected by 41% of the participants. A one-sample Wilcoxon signed-rank test against the middle of the scale (4) indicated that study participants tend to ascribe suicide in this scenario, $V_{Wilcoxon} = 1639.0$, $p < .001$, $r_{rb} = .73$, $n_{obs} = 66$. See Figure 2b.

Discussion. The study results show that even if the agent kills herself in order to avoid a worse condition and explicitly does not want to die, study participants still describe it as suicide. This provides some evidence that the folk do not share Battin's suggestion that focus on the agent's intention to avoid a worse fate should result in recognising that such an agent did not die by suicide.

Study 4. Separate and joint evaluation

Studies 1 - 3 looked at abstract TISK. But this is not how TISK is practised in the countries where it is legalized as "aid in dying" where in one or another form a third party is involved. Namely, there usually is a physician who prescribes the drugs or, as in Smedley's case, the "escorts" who prepare the drug and give it to the patient. To cover this lacuna, we decided to conduct a study which reflects this feature of real-life TISK. This would allow us to explore

how the presence of a third party influences suicide ascriptions. To do this we used an example described by Jeff McMahan.[12] Discussing the moral difference between assisted suicide and euthanasia, McMahan asks his readers to imagine two different cases. In one case, a terminally ill patient connected to Kevorkian's machine pushes the button and kills himself. In another, due to his physical incapacity, the patient cannot push the button himself and asks somebody else to do it. Inspired by McMahan we constructed two vignettes so that the only relevant difference between them is that in one case there is the third party, who assists the patient to get attached to a Kevorkianian kind of machine and the patient pushes the button that causes her death, while in the other, the patient is incapable to push the button herself and therefore asks a third party to do that for her.

Participants. 293 study participants were recruited for this study. Fourteen failed at least one comprehension question, resulting in $n = 279$, $M_{age} = 39.7$, $SD_{age} = 13.4$, age range 19-80, 50% female, 49% male, 1% non-binary.

Materials. Study participants took part in one of three versions of this study: *separate evaluation*, *joint evaluation*, *joint evaluation with justification*.

Separate evaluation condition. In *separate evaluation*, study participants read two scenarios, presented on separate pages, in two counterbalanced orders. The first scenario describes a person called Mary who is physically capable of pushing the button herself.

> Mary suffers from an untreatable form of cancer. As she suffers mentally and physically, she wants to end her life. Patricia has designed a device that might help Mary. The device contains a lethal medicine and a patient who is connected to it just has to push the button to release the chemical into the bloodstream to cause his or her death. Mary gets connected to Patricia's machine. Mary pushes the button and within a few minutes, Mary dies.

The other scenario describes a person called Elizabeth who is not physically capable to push the button herself.

> Elizabeth suffers from amyotrophic lateral sclerosis, a degenerative and untreatable disease. As she suffers mentally and physically, she wants to end her life. Linda has designed a device that might help Elizabeth. The device contains a lethal medicine and a patient who is connected to it just has to push the button to release the chemical into the bloodstream to cause his or her death. Elizabeth gets connected to Linda's machine. However, due to her condition, she is not able to push the button herself. Elizabeth asks Linda to push the button. Linda pushes the button and within a few minutes, Elizabeth dies.

After each scenario, as an attention check, participants had to choose who was the person who pushed the button. Then, study participants had to provide a dichotomous yes/no response whether the following claim is true (according to the scenario):

> '[Mary/Elizabeth] has committed suicide.'

Furthermore, after each scenario, study participants indicated on a scale from 1 (Completely disagree) to 7 (Completely agree) whether they agree or disagree with the following five claims (first three claims presented in the randomized order while the remaining two about blameworthiness presented in a fixed order):

‘[Mary/Elizabeth] has committed suicide.’
‘[Mary/Elizabeth] has killed herself.’
‘[Patricia/Linda] has killed [Mary/Elizabeth].’
‘[Mary/Elizabeth] is blameworthy.’
‘[Patricia/Linda] is blameworthy.’

Joint evaluation condition. The same study materials were used as in *separate evaluation*, with the following modifications. First, Mary and Elizabeth vignettes were presented not on separate pages but on the same page, in two counterbalanced orders. For reference, the vignette that was presented first was labelled ‘Scenario 1’ and the one presented second was labelled ‘Scenario 2’. Second, instead of a dichotomous ascription of suicide, a more complex categorical question was presented after the two vignettes. Namely, study participants were asked to choose which of the following four descriptions (presented in a randomized order, a character introduced in respective Scenario 1 is mentioned first) is the most suitable:

Both Mary and Elizabeth have committed suicide.
Only Mary has committed suicide.
Only Elizabeth has committed suicide.
Neither Mary nor Elizabeth has committed suicide.

Finally, both sets of Likert questions were provided, the one corresponding to the respective Scenario 1 presented first.

Joint evaluation with justification condition. *Joint evaluation with justification* was the same as *joint evaluation* except that study participants were additionally asked to explain their response to the categorical question in one or two sentences. This was done in order to increase reflection.

Results:

No order of presentation effects on either of the two ascriptions of suicide were observed in either *separate* or *joint evaluation* conditions (all *p*s > .20). Therefore, in further analyses we ignore the order of presentation. Median scores for all ascriptions are presented in Table 3.

	Measure				
	Protagonist			Another agent	
Vignette	Suicide	Killing	Blame	Killing	Blame
Mary	7	7	3	1	1
Elizabeth	5	5	3	4	2

Table 3. Median scores for all ascriptions in Study 4.

Ascriptions of suicide on Likert scales. No differences between the three conditions were observed in suicide ascriptions on Likert scale for either Mary (Kruskal-Wallis test, $H(2) = 1.87$, $p = .392$) or Elizabeth ($H(2) = 0.60$, $p = .740$). Study participants clearly ascribed suicide to Mary ($Mdn = 7$, $V_{\text{Wilcoxon}} = 35120.5$, $p < .001$, $r_{\text{rb}} = .86$, $n_{\text{obs}} = 279$). While ascriptions of suicide to Elizabeth were also slightly above the middle of the scale ($Mdn = 5$, $V_{\text{Wilcoxon}} = 21171.0$, $p < .001$, $r_{\text{rb}} = .28$, $n_{\text{obs}} = 279$.), study participants were much more inclined to ascribe suicide to Mary than to Elizabeth, $W_{\text{Wilcoxon}} = 11661.5$, $p < .001$, $r_{\text{rb}} = .98$, see Figure 2c.

Ascriptions of suicide on dichotomous scales in separate evaluation condition. While 98% of study participants thought that Mary has committed suicide (more frequently than could be expected by chance alone, binomial test, $p < .001$), only 59% ascribed suicide to Elizabeth (no different from chance, binomial test, $p = .064$). Thus, on dichotomous scale, participants more frequently ascribed suicide to Mary than to Elizabeth, McNemar test, X^2 (1) = 46, $p < .001$, $n_{pairs} = 117$.

Ascriptions of suicide on categorical scale in joint evaluation conditions. No differences in responses were observed depending on whether study participants were asked to provide a justification, X^2 (1) = 1.51, $p = .470$, $n_{obs} = 162$. Overall, 51% of participants ascribed suicide to both Mary and Elizabeth. 40% only to Mary. Remaining 9% thought that neither of the two has committed suicide. There were no participants who thought that it is only Elizabeth but not Mary that has committed suicide.

Correlations and other analyses. Strong positive correlation was observed between ascriptions of suicide and ascriptions of killing oneself for both Mary ($r_s = .76$, $p < .001$) and Elizabeth ($r_s = .67$, $p < .001$). While participants strongly disagreed that Patricia has killed Mary ($Mdn = 1$, $V_{Wilcoxon} = 901.0$, $p < .001$, $r_{rb} = -.95$, $n_{obs} = 279$), their responses as to whether Linda has killed Elizabeth did not differ from the middle of the scale ($Mdn = 4$, $V_{Wilcoxon} = 16558.0$, $p = .083$, $r_{rb} = .13$), a statistically significant difference, $W_{Wilcoxon} = 233.5$, $p < .001$, $r_{rb} = -.98$.

Qualitative examples. Participants who selected the answer "Both Mary and Elizabeth have committed suicide" provided explanations that focused more on the intention and the decision of the character in the vignettes. For example, one participant (M, 35) writes: "Both wanted to die and of their free will. If Elizabeth could have pushed the button she would. Whoever pushed the button is irrelevant." Another participant (F, 68) noted that: "Both chose to die and arranged to do so." Similarly, another participant (F, 43) explains her answer, writing: "They both chose to end their lives. Just because one couldn't press the button, doesn't make a difference. She asked the lady to do it." Those participants, who selected the answer "Only Mary has committed suicide" focused on the causal mechanism that brings about the character's death. One participant (M, 39) points out, "Only Mary began the action that ended her life." Another participant (M, 33) provides a more detailed explanation: "Mary pushed the button herself to die so has committed suicide. Elizabeth was not capable of pushing the button so someone else had to do this and killed her, although these were Elizabeth's wishes she did not actually commit suicide." Yet another participant (F, 58) provides a similar explanation: "Strictly speaking, Mary committed suicide because she chose to press the button and pressed the button herself. Elizabeth didn't commit suicide as she asked someone else to press the button, this is assisted dying, not suicide. It is only suicide if Elizabeth had been able to press the button herself."

Discussion. The core finding in Study 4 is that study participants clearly ascribe suicide to Mary (who herself pushes the button, resulting in her death), yet much less clearly to Elizabeth (where a third party pushes the button). This suggests that the conceptualisation of suicide is very sensitive to the causal details of the story. In particular, who pushes the button. Furthermore, suicide ascriptions seem to be rather stable. Namely, suicide ascriptions do not seem to be influenced by the order of presentation of the cases nor do they change in joint evaluation conditions, even if one adds the justification task.

Written explanations provided by the study participants indicate that those who answered that only Mary has committed suicide were primarily guided by the causal mechanism in the

scenario. Interestingly, the participants who considered that both Mary and Elizabeth committed suicide in their explanations tended to emphasise the intentions of the agents at the expense of the causal details.

General discussion and conclusion

Several authors have argued that TISK is not suicide. Our studies, however, suggest that this is not how non-philosophers tend to think about TISK. Study 1 indicates that suicide ascriptions are very sensitive to all three elements (intention, foreseeability, action) present in the so-called standard account of suicide, i.e., as soon as one of them is absent, the suicide ascriptions drop considerably. On the other hand, if all of them are present in the case of TISK, study participants tend to think it is suicide. Therefore, Caplan's and Kupfer's worries that the terminal condition of the agent disqualifies TISK as suicide cannot be supported by how the notion of suicide is used in ordinary language. Moreover, Study 2 showed that the temporal closeness of an agent's inevitable death also has no effect on suicide ascriptions. If a person kills herself in a situation where her inevitable death is otherwise temporally very close, this still results in very clear ascriptions of suicide.

Further, Battin has argued that cases of TISK cannot be considered cases of suicide because what an agent actually intends is not their death but to avoid the condition that is worse, i.e., the suffering caused by their affliction. Battin speculates that we are inclined to classify TISK as suicide because we focus on the causal mechanism of the event. If we focused on the agent's intentions instead, we would correctly see that TISK is not suicide. Our Study 3 shows that Battin's view is not supported by how non-philosophers tend to think about TISK. Even if it is made explicit that the agent does not want to die and takes the lethal pill in order to avoid getting into a worse condition, study participants still consider the action suicide. Finally, Study 4 suggests that involvement of the third-party is very important in ascriptions of suicide. Ascriptions of suicide drop dramatically when a third-party provides direct assistance in dying by being a proximate cause of death. This result underscores the importance of the causal structure involved in terminally ill self-killing. Still, study participants differed widely in their judgments about the case involving third-party assistance, and their qualitative justifications indicate that there may be two different concepts of suicide in play - one stressing the mechanics of proximate causation and another one focusing on the intention to die.

This paper can be seen as both a methodological (as it develops methods to study suicide ascriptions) and a substantial (as it describes a number of patterns in such ascriptions) contribution to the study of the lay concept of suicide. This, we believe, is worthwhile independently from potential further use of such descriptive results in both philosophical theorising about suicide and normative discussions on end-of-life situations in medicine.

We want to be clear, however, that the results of the studies don't immediately show that the authors who argue that TISK is not suicide are wrong in their philosophical arguments. At least if their claims are taken either as attempts to revise the concept of suicide or as analysis of the essence of the concept of suicide. If their claims are interpreted in one of these ways, then these authors can afford to ignore folk judgments on the issue. If, however, they want to appeal to the way non-philosophers use this concept - and it seems that many authors arguing that TISK

is not suicide do that, at least to a certain degree[5], then the results of our study suggest that their claims conflict with the folk concept of suicide. How precisely such descriptive results should (or should not) be incorporated into the philosophical study of the concept of suicide is a complex matter that depends on a number of metaphilosophical commitments that are rarely explicit in philosophical discussions.

Language of "suicide" is also sometimes taken to be normatively and regulatory relevant. For instance, many activists, policymakers and other stakeholders who argue and campaign for the legalization of assisted suicide, especially in the USA, try to avoid the word "suicide" and consider the term "assisted suicide" as politically incorrect [13]. In this vein, some bioethicists attempt to engineer a novel concept that would include TISK without implying that it is a kind of suicide. It is not clear, however, how effective such a strategy could be. According to a recent study [14], a description of a practice has an effect on moral permissibility judgments, i.e., if a practice is described as "aid in dying" people think that it is more acceptable than a practice described as "physician-assisted suicide", but the effect is rather modest. We believe that descriptive study of folk ascriptions of suicide can benefit these normative and regulatory discussions in various ways, ranging from assessing how far a suggested conceptual innovation diverges from ordinary use (which may influence uptake of the new concept) to assessing which specific features of various "aid in dying" practices trigger associations with normatively charged concepts (such as "suicide" or "killing").

Ethics Review: The studies were approved by Research Ethics Committee at Rīga Stradiņš University.

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References

1. Hill JD. What is it to commit suicide? *Ratio* 2011; 24(2): pp.192-205.

2. Cholbi M. Suicide: the philosophical dimension. Peterborough: Broadview Press, 2011.

3. Dowie SE. What is suicide? Classifying self-killings. *Med Health Care Phil* 2020; 23: 717-733. https://doi.org/10.1007/s11019-020-09964-1

4. Luper S. The philosophy of death. Cambridge: Cambridge University Press, 2009, 172-173.

5. Reed P. Is "aid in dying" suicide? *Theor Med Bioeth* 2019; 40: pp. 123-139.

[5] To be fair, Kupfer, after suggesting that in order for an act to be considered suicide the agent must have the option of an indeterminate time, points out that this suggestion may seem "overly stipulative" and "will not conform to everyone's intuition." Still, when he discusses which cases are and which are not suicide, he uses examples assuming, that his readers will agree with his judgements.

6. Brock DW. Voluntary active euthanasia. In: Brock DW (ed.) Life and death: Philosophical essays in biomedical ethics. New York: Cambridge University Press, 1993, pp.202-232.

7. Kamm FM. Conceptual issues related to ending life. In: Kamm FM. *Bioethical prescriptions*. New York: Oxford University Press, 2013, pp.33-41.

8. Sumner LW. Physician-assisted death: what everybody needs to know. New York: Oxford University Press, 2017.

9. Buttin MP. Death with dignity: Is it suicide? OUPBlog https://blog.oup.com/2015/11/death-with-dignity-suicide (2015, accessed 20 November 2022).

10. Caplan AL. The case for assisted dying. Chicago Tribune, September 16. https://www.chicagotribune.com/opinion/commentary/ct-assisted-dying-california-jerry-brown-perspec-0917-20150916-story.html (2015, accessed 20 November 2022).

11. Kupfer J. Suicide: Its nature and moral evaluation. *J Value Inquiry* 1990; 24: 67-81.

12. McMahan, J. The ethics of killing. Oxford: Oxford University Press, 2002.

13. Dworkin G. California dying. 3 Quarks Daily, June 1. https://3quarksdaily.com/3quarksdaily/2015/06/california-dying.html (2015, accessed 20 November 2022).

14. Feltz A. Everyday attitudes about euthanasia and the slippery slope argument. In: Cholbi M and Valerius J (eds) *New Directions in the ethics of assisted suicide and euthanasia*. Dordrecht: Springer, 2015, pp. 217-237.