Reasons why people in Switzerland seek assisted suicide: the view of patients and physicians

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Summary

Background: Assisted suicide is permitted in Switzerland provided that assistance is not motivated by selfish reasons. Suicides are commonly performed with the assistance of right-to-die organisations and the use of a lethal dose of barbiturates prescribed by a participating physician. We examined the reasons physicians provided for writing the prescription and the reasons patients gave for requesting assistance in dying.

Methods: We analysed all reported cases of assisted suicide that were facilitated by right-to-die organisations between 2001 and 2004 in the city of Zurich, and for which both the medical report and the optional letter written by the decedent providing information on their reasons for seeking assistance in suicide (N = 165).

Results: The reasons most often reported by physicians (ph), as well as persons who sought help (p), were: pain (ph: 56% of all assisted suicides, p: 58%), need for long-term care (ph: 37%, p: 39%), neurological symptoms (ph: 35%, p: 32%),

immobility (ph: 23%, p: 30%) and dyspnoea (ph: 23%, p: 23%). Control of circumstances over death (ph: 12%, p: 39%); loss of dignity (ph: 6%, p: 38%); weakness (ph: 13%, p: 26%); less able to engage in activities that make life enjoyable (ph: 6%, p: 18%); and insomnia and loss of concentration (ph: 4%, p: 13%) were significantly more often mentioned by decedents than by physicians.

Conclusions: Both prescribing physicians and patients provided with assistance to die quite often mentioned pain and other concerns, many of which were objectively assessable and related to unbearable suffering or unreasonable disability. Concerns referable to autonomy and individual judgement were more often noted by people seeking help than by the prescribing physicians.

Key words: assisted suicide; Switzerland; right-todie organisation; physician; decedent, reasons to die

Introduction

Under Article 115 of the Swiss Penal Code assisting in suicide without any self-interest is legal provided that the person seeking assistance is of sound mind. Since no medical preconditions are required, the person seeking assistance need not be terminally ill. Most assisted suicides are facilitated by private right-to-die organisations. The service is offered only after an evaluation process, which requires that the wish to die is deliberate and stable, the member suffers from a disease with a hopeless prognosis, and the suffering is unbearable or an "unreasonable disability" is present. Suicide is committed with a lethal dose of

barbiturates (sodium pentobarbital). As pentobarbital is a controlled substance, a physician's prescription is required. Medical law and regulation require participating physicians to ascertain the patient's rational capacity and to assess the medical condition giving rise to the desire to die before a prescription can be issued [1]. All assisted suicides are treated as extraordinary deaths and are investigated by the authorities [2, 3].

To date, no study has investigated the reasons why people in Switzerland seek an assisted death nor have the reasons Swiss physicians provide for their participation been elicited. Studies on this

Funding support: The study was supported by grants from the Swiss National Science Foundation (SNSF) and the Swiss Academy of Medical Sciences (SAMS). topic from other countries are quite scarce and have been mostly focused on specific groups of patients, such as those suffering from cancer, HIV/AIDS or elderly people without a severe disease [4–6]. Furthermore, most studies involving physicians are limited to attitudes or beliefs [7–9], rather than the reasons provided by patients and the reasons for issuing the lethal prescription [4].

The aim of our study was to examine the reasons physicians mention in their medical reports for their willingness to write a prescription for a lethal drug to members of a Swiss right-to-die or-

ganisation who seek assistance in suicide. Due to the variation in distress and dependency that is associated with different types of death [10], the reasons physicians prescribe and patients seek assistance have been analysed by cause of death. Moreover, we wanted to know how closely physicians' concerns correspond with patients' reasons for requesting assisted suicide. Finally, we investigated the correlations between decedents' characteristics and the reasons noted by patients as well as physicians.

Methods

This study is based on an analysis of all reported assisted suicides in the city of Zurich between 2001 and 2004 (N = 421) [10]. Data for this study stem from the medico-legal files held at the Institute of Legal Medicine of the University of Zurich (ILMZ), the official body responsible for the medico-legal investigation of all extraor-

Box 1
Scheme of classification for reasons listed by physician and/or patient.

	examples
Physical	
pain	unbearable pain
neurological symptoms	restlessness; acroanaesthesia; dysarthria; itching
dyspnoea	problems of respiration; fear of suffocation; choking fit
weakness	adynamia; fatigue
visual and aural impairment	highly visually or aurally handicapped; blind; deaf
losing control of bodily functions	faecal or urinary incontinence (diarrhoea, bladder problems)
sleep disorders	insomnia, lack of non-REM sleep, and loss of concentration during waking hours
Social	
need for long-term care	impending entrance in a nursing home or home for the elderly
immobility	bedridden; walking disability; impending imposition of a wheelchair
social isolation	limited or no friends, no loved-ones
Psycho-existential	
weariness of treatments	assisted suicide in order to prevent an upcoming medical treatment; for instance: surgery resulting in an ,anus prater' a face deforming radical tumour expiration proposition of a PEG tube
control of circumstances of death	self-determination in dying; for instance: "I believe devoutly to have the right to decide when and how I will die" "She wants to hold off on dying till autumn or winter as she loves the warm season"
less able to engage in activities making life enjoyable	losing the ability for activities such as cooking, writing, reading
loss of dignity	the words "dignity", "dignified" were specifically mentioned: "perceive my life as inhuman, undignified, as a languish"
weariness of life	"I cannot bear this monotonous life any longer"

dinary deaths occurring in the city of Zurich. Each one of these files contains a structured report by a medico-legal expert and a record sheet from the right-to-die organisation. The files also include additional documents, such as a medical report/opinion written by the prescribing doctor (mandatory) and a letter or note written by the person seeking assisted death (optional). In an effort to compare the reasons provided by the decedent for seeking assisted suicide to the entries in the medical report, we subsequently identified and analysed all files in which both the medical report and the optional letter written by the decedent provided any information on the applicant's reasons for seeking assistance in suicide (N = 165). Reasons for seeking and providing assistance were divided into physical, social and psycho-existential domains since previous studies revealed that the motivation for assisted suicide is a multi-factorial phenomenon; see box 1 [5, 6].

The structured reports and forms were analysed to determine whether socio-demographic and medical parameters of the deceased persons correlated with the reasons for prescribing and seeking an assisted death. Decedents' characteristics considered in this study were: sex, age and medical diagnoses (malignancies, cardiovascular/respiratory diseases, neurological diseases, rheumatoid diseases/pain syndromes, mental disorders and others).

SPSS 14 was used for the statistical analysis [12]. Percentages of assisted suicides were calculated depending on the reasons provided. Chi-square tests were used to test for statistically significant differences. Multivariate logistic regressions were used to analyse the association between decedents' sex, age and diagnosis with each reason. For these analyses the variables "age" and "diagnosis" were dichotomized in ≤64/≥65 years and in fatal/non fatal diseases, combining "cancer, cardiovascular/respiratory diseases, neurological diseases, HIV/AIDS (= subgroup of the category others)" on one side and "rheumatoid diseases, pain syndromes, mental disorders and diagnosis "others" such as blindness, paralysis and "general weakness" on the other side.

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Results

Number of cases and characteristics of the deceased (table 1)

A total of 421 cases of assisted suicide were reviewed for the period 2001–2004. 165 of these cases included a medical report and a letter written by the decedent both providing information on the applicant's reasons for seeking assistance in suicide. Although the 165 cases may not be representative of all 421 cases since people aged 85 years and over are underrepresented in our subsample of 165 (≥85 years: 15.9% [N = 421] vs. 8.5% [N = 165]; p = 0.02), no significant differences exist between the sample and the subsample for other socio-demographic characteristics and medical diagnoses.

Physicians' reasons (table 2)

For the majority of cases (70%), physicians gave more than one reason to justify the prescribing of a lethal substance. They mentioned pain most often (for 56% of all assisted suicides), need of long-term care (37%), neurological symptoms (35%), immobility (23%), and dyspnoea (23%). Less frequently they reported (in between 2% and 15% of all cases) other reasons such as weakness, weariness of treatments, control of the circumstances of death, social isolation, visual and aural impairment, losing control of bodily func-

Table 1
Characteristics of the deceased for the sample and the sub-sample.

		all cases of assisted suicide during 2001–2004 (n = 421) %	cases for which reasons are available (n = 165) %	P Value*
Sex	women	64.4	66.1	0.70
	men	35.6	33.9	
Age	≤44	6.9	8.5	
	45–64	33.3	40.6	0.07†
	65–84	43.9	42.4	0.02‡
	≥85	15.9	8.5	
Diagnosis	malignancy	38.2	33.9	
	cardiovascular/respiratory disease	11.6	10.3	
	neurological disease	24.5	30.3	
	rheumatoid diseases/ pain syndromes	9.3	10.3	0.65§
	mental disorder	2.9	2.4	
	other	13.3	12.7	
	missing	0.2	0.0	
Туре	non-fatal illness	24.9	24.8	
of diagnosis	fatal illness	74.8	75.2	0.97
	missing	0.2	0.0	

^{*} Chi-square test was used to compare the sub-sample with the sample; test without category missing

tions, less able to engage in activities that make life enjoyable, loss of dignity, weariness of life, insomnia and loss of concentration.

However, when examined for individual medical diagnosis, the justifications for prescribing the lethal substance differed. For instance, in decedents suffering from a malignancy, the most often mentioned justification for the lethal prescription was pain (71%), followed by treatment weariness (29%), and dyspnoea (25%). For cardiovascular and respiratory diseases, the 'need of long-term care' (59%), dyspnoea (47%), pain (35%), neurological symptoms (35%) as well as weakness (29%) and social isolation (29%) were commonly reported reasons. Neurological symptoms (58%) and need of long-term care (56%) were the most often reasons for neurological diseases, followed by immobility (38%), pain (34%) and dyspnoea (28%). Predominant reasons for rheumatoid diseases and pain syndromes were pain (88%), need of longterm care (41%), and immobility (29%). Treatment weariness and social isolation were mentioned for two of the four persons suffering from mental disorders; pain and tired of life was the reason given in another one of these four cases. For other diagnoses such as blindness, paralysis and general weakness, pain (62%), neurological symptoms (48%) and the need for long-term care (43%) were frequently mentioned, as shown in table 2.

Comparison between physicians' and decedents' reasons (table 3)

Decedents mentioned more reasons for a lethal prescription than the prescribing physicians (mean number of reasons followed by standard deviation: decedents: 3.8 (2.0); physicians: 2.6 (1.4). Both physicians and decedents most often noted pain as a reason to perform suicide (56%; 58%), followed by the need for long-term care (37%; 39%) and neurological symptoms (35%; 32%). For other reasons such as immobility, dyspnoea, visual and hearing impairment, losing control of bodily functions and social isolation the number of times mentioned by physicians and decedents does not significantly differ.

Over one third of people who sought assistance in suicide mentioned control of circumstances of their death and loss of dignity, whilst physicians mentioned these concerns significantly less frequently (39% versus 12%; 38% versus 6%). Furthermore, decedents included weakness (26% versus 13%), less able to engage in activities that make life enjoyable (18% versus 6%), insomnia and loss of concentration (13% versus 4%) significantly more often than the prescribing physicians. In regard to weariness of life the difference of frequency between physicians and people who sought help was in the same direction (12% versus 2%). Chisquare test could not be used as this reason was very seldom mentioned by physicians (n = 4).

[†] Test for four categories (≤44 years, 45–64 years, 65–84 years, ≥85 years)

[‡] Test for two categories (≤84 years, ≥85 years)

[§] Test without categories mental disorder and missing

Table 2
Physicians' reasons and causes of death – multiple answers (N = 165).

	Malignancy (%)	Cardiovascular/ respiratory disease (%)	Neurological disease (%)	Rheumatoid diseases/ pain syndromes (%)	Mental disorder (%)	Other (%)	Total N (%)
n (%)	56 (34)	17 (10)	50 (30)	17 (10)	4 (2)	21 (13)	165 (100)
Physical reasons							
pain	71	35	34	88	25	62	92 (56)
neurological symptoms	18	35	58	18	0	48	58 (35)
dyspnoea	25	47	28	12	0	0	38 (23)
weakness	11	29	12	18	0	10	22 (13)
visual and aural impairment	7	24	6	18	0	19	18 (11)
losing control of bodily functions	5	24	8	0	0	14	14 (9)
insomnia and loss of concentration	4	0	4	6	0	10	7 (4)
Social reasons							
need of long-term care	13	59	56	41	0	43	61 (37)
immobility	11	24	38	29	0	19	38 (23)
social isolation	4	29	6	12	50	10	16 (10)
Psycho-existential reasons							
weariness of treatments	29	6	4	6	50	14	25 (15)
control on circumstances of death	7	12	16	6	0	24	20 (12)
less able to engage in activities making life enjoyable	5	6	6	6	0	5	9 (6)
loss of dignity	7	6	4	0	0	10	9 (6)
weariness of life	0	0	2	6	25	5	4 (2)

Table 3Physicians' and decedents' reasons – multiple answers (N = 165).

	physicians n (%)	deceased n (%)	P value
Physical reasons			
pain	92 (56)	95 (58)	0.74
neurological symptoms	58 (35)	53 (32)	0.56
dyspnoea	38 (23)	38 (23)	1.00
weakness	22 (13)	42 (26)	0.005
visual and aural impairment	18 (11)	18 (11)	1.00
losing control of bodily functions	14 (9)	14 (9)	1.00
insomnia and loss of concentration	7 (4)	21 (13)	0.006
Social reasons			
need of long-term care	61 (37)	65 (39)	0.65
immobility	38 (23)	49 (30)	0.17
social isolation	16 (10)	15 (9)	0.85
Psycho-existential reasons			
weariness of treatments	25 (15)	35 (21)	0.15
control on circumstances of death	20 (12)	65 (39)	0.000
less able to engage in activities making life enjoyable	9 (6)	30 (18)	0.000
loss of dignity	9 (6)	62 (38)	0.000
weariness of life	4 (2)	19 (12)	- *

^{*} Chi-Square test not applicable; this reason was very seldom mentioned by physicians (n = 4)

Correlations between decedents' characteristics and reasons (table 4)

Multivariate logistic regressions revealed some statistically significant correlations between decedents' characteristics (sex, age and medical diagnosis) and reasons. For men, the existence of pain was less likely to be listed as a reason (physicians: OR: 0.42; 95%-CI: 0.21 to 0.82; decedents: OR: 0.33; 95%-CI: 0.17 to 0.64). Moreover, according to the written statements by decedents, insomnia and loss of concentration were more likely to be mentioned by men than women (OR: 2.64; 95%-CI: 1.02 to 6.76). Further, visual and aural impairment was more often listed for those considered elderly (decedents: OR: 3.45; 95%-CI: 1.06 to 11.2; physicians: OR: 3.88; 95%-CI: 1.21 to 12.50). People suffering from fatal diseases had a higher probability of dyspnoea (physicians: OR: 7.92; 95%-CI: 1.81 to 34.72; deceased: OR: 4.79; 95%-CI: 1.38 to 16.62) but a lower probability of visual and aural impairment (deceased: OR: 0.32; 95%-CI: 0.11 to 0.89), were less able to engage in activities that make life enjoyable (deceased: OR: 0.24; 95%-CI: 0.10 to 0.58), and tired of life (physicians: OR: 0.06; 95%-CI: 0.01 to 0.65; deceased: OR: 0.07; 95%-CI: 0.02 to 0.21).

Discussion

The first significant finding of this study concerns the reasons people seek a lethal prescription and the justifications for prescribing it. Previous studies revealed that the motivation for assisted suicide is a multi-factorial phenomenon, including

physical (such as pain, dyspnoea), social (such as dependency, burden on others, loneliness), and psychoexistential domains (such as loss of control, autonomy and dignity, suffering from life, through with life) [5, 6]. Similar to previous studies [13], the rea-

sons for assisted suicide observed in our study were related to several multidimensional factors, including physical (neurological symptoms, dyspnoea, weakness, visual and aural impairment, losing control of bodily functions, insomnia and loss of concentration), social (dependency – need of long-term care, immobility – and social isolation) as well as psycho-existential domains (control of circumstances of death, loss of dignity, tired of life, less able to engage in activities that make life enjoyable, treatment weariness).

However, unlike many studies in the past [14], this study revealed the predominant role of pain for the assistance of suicide. Specifically, in more than half of all assisted suicides, physicians as well as the people who sought assistance with suicide unbearable pain was recorded as a reason and pain was of particular importance for people suffering from a malignancy, from rheumatoid diseases and pain syndromes. Studies investigating intended behaviours towards physician-assisted suicide among physicians, patients and the public have shown that agreement on assisted dying is relatively high if the patient suffers from unbearable pain, whereas it is lower if other reasons, such as dependency or weariness of life are mentioned [7, 15–17]. Thus, we could conclude that the prescribing physicians in our present study were more likely to indicate unbearable and intractable pain as a condition for assisting suicide since the existence of pain is a socially widely accepted reason to participate in assisted dying. Furthermore, we can assume that physicians very often mentioned pain since the relief of suffering is compatible with the professional role and the medical ethos.

However, when reviewing data on pain management, we have to consider whether existing guide-

Table 4Importance of sex, age and fatal/non-fatal illness on reasons. Multivariate logistic regressions. (N = 165, odds ratios).

	Men		≥65 yea	ars	fatal disease	
	Phys.	Pat.	Phys.	Pat.	Phys.	Pat.
Physical reasons						
pain	0.42*	0.33*	1.74	1.53	0.47	0.72
neurological symptoms	1.83	1.26	0.56	0.73	1.09	1.12
dyspnoea	1.24	1.47	1.09	0.93	7.92*	4.79*
weakness	1.43	0.82	1.88	0.97	1.19	1.31
visual and aural impairment	1.91	0.91	3.88*	3.45*	0.64	0.32*
losing control of bodily functions	1.51	1.57	1.36	1.32	1.22	0.80
insomnia and loss of concentration	1.77	2.63*	2.41	0.56	0.43	1.35
Social reasons						
need of long-term care	0.83	0.54	1.21	0.71	0.93	1.03
immobility	0.85	0.71	0.55	0.86	1.01	0.76
social isolation	1.34	1.49	2.20	1.42	0.54	0.45
Psycho-existential reasons						
weariness of treatments	1.08	0.53	0.74	1.51	1.32	0.73
control on circumstances of death	1.76	1.94	0.95	1.43	0.70	1.33
less able to engage in activities making life enjoyable	2.54	1.86	0.79	0.60	1.04	0.24*
loss of dignity	1.62	1.44	2.07	0.83	1.19	0.66
weariness of life	0.42	2.05	†	0.64	0.06*	0.07*

^{*} odds ratio differs significantly from 1.0 ($\alpha = 0.05$).

lines for pain relief were applied appropriately and to what extent pain management was not optimal. Different studies indicate that the doses of opioids administered by physicians are often too low to alleviate pain adequately [18, 19], especially for older patients and in patients suffering from non-malignant diseases [20, 21]. Based on these earlier studies, it could be argued that some people may request assistance in suicide as the result of inadequate palliative care. Nevertheless, studies investigating requests for hastened death on palliative care units and hospices indicate that such desires may be expressed even in the case of optimal pain management [5, 22, 23], as such requests may arise from other types of suffering, including existential suffering [24].

In the present study, the need for long term care, immobility, neurological symptoms and dyspnoea are often noted in the medical reports and in the letters of the deceased (for about one-third and one-fourth of all cases, respectively). These findings suggest that reasons associated with disability and dependency (need for long term care, immobility), which can be subsumed under social aspects on the one hand, and strong physical symptoms (dyspnoea, neurological symptoms) on the other hand, are very often mentioned. The importance of these reasons, as well as the existence of pain, comes as no surprise given that unbearable suffering and unreasonable disability are necessary preconditions for assistance by Swiss right-to-die organisations [3].

The second important finding of our study is the identification of the differences and similarities between the reasons given by physicians and decedents for either assisting a suicide or seeking a physician's assistance. Our results demonstrate that people who sought assisted suicide more often expressed psychoexistential concerns than the prescribing physicians. More than one-third of all decedents noted control over the circumstances of death and loss of dignity as reasons for seeking assistance, whilst physicians seldom mentioned these concerns (for 12% and 6% of all cases, respectively). In contrast, the frequencies for social (e.g., social isolation) and physical concerns (e.g., pain, dyspnoea) barely differ among the two groups (with the exception of weakness, insomnia and loss of concentration).

The differences in these results may be due to the fact that Swiss law and regulation requires physicians participating in assisted suicide to assess those medical condition(s) motivating a person's desire to seek assisted death, which in turn may result in physicians focusing on the medical reasons rather than the existential ones in their reports. Moreover, with the exception of pain, most physical and social concerns are to a greater extent more objectively measurable than psycho-existential concerns. Furthermore, it is also known that many physicians have difficulty addressing the existential suffering of a patient as this type of suffering is seen as falling outside traditional clinical medicine [24]. From this it follows that many physicians have never discussed this type of suffering with their patients: "Most physicians were uncomfortable when issues of nonphysical suffering arose during

[†] the variable "age" could not be introduced in the analysis; this reason was very seldom mentioned by physicians (n = 4) and if so, just for people aged 64 years or younger.

their patient visits. They cited feelings of powerlessness to intervene, which led them to avoid the subject or to feel frustrated at the prospect of further interactions" [24, p. 660].

The third important result of this study is the identification of correlations between decedents' characteristics and reasons. Many existing studies have indicated sex differences in pain. Explanations for these differences have focused on biological mechanisms [25], as well as social learning and gender-role stereotypes [26, 27]. Our results are consistent with these previous findings. Pain was more often mentioned for women than men, namely by the prescribing physicians as well as by people who sought assistance in suicide. The fact that visual and hearing impairment was more likely for elderly people (decedent and physician comments), and among people suffering from non fatal diseases (decedent reasons), comes as no surprise since the natural ageing process is the most frequent cause of these impairments [28, 29]. Moreover, the present study found that among people suffering from a fatal disease, dyspnoea (decedent and physician) was more common and 'less able to engage in activities that make life enjoyable' (decedents) as well as weariness of life (decedents and physicians) were less common than among people suffering from a non-fatal disease. This suggests that in the event of a person suffering from a fatal disease it is not necessary to mention additional, non medical reasons. However, on the basis of our data and the literature, we were not able to explain why our results demonstrated that insomnia and loss of concentration were more likely for men (decedent comments).

Some limitations should be borne in mind in assessing the significance of these results. Our data stem from the medico-legal files of cases of assisted suicide. It is conceivable that physicians as well as people who seek help for suicide tended to provide those reasons they regarded socially or legally acceptable. In addition, we do not have statements on how important the different reasons were for a physician's willingness to prescribe the lethal drug and the person's wish to hasten death. Hence, we are only able to indicate how frequently these concerns are noted. Moreover, our study was restricted to cases of assisted suicide that took place in the city of Zurich. This means that the results may not be extrapolated to other regions of Switzerland. Moreover, the 165 cases studied may not be representative of all cases of assisted suicide that took place in the city of Zurich, particularly in regard to decedents aged 85 and older.

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