

# Physical and psychological factors and the wish to hasten death in advanced cancer patients

Christian Villavicencio-Chávez<sup>1,2</sup>, Cristina Monforte-Royo<sup>3,4</sup>, Joaquín Tomás-Sábado<sup>5</sup>, Markus A. Maier<sup>6</sup>, Josep Porta-Sales<sup>1,2,4</sup> and Albert Balaguer<sup>2,4\*</sup>

<sup>1</sup>Palliative Care Service, Institut Català d'Oncologia, Barcelona, Spain

<sup>2</sup>School of Medicine and Health Sciences, Universitat Internacional de Catalunya, Barcelona, Spain

<sup>3</sup>Department of Nursing, Universitat Internacional de Catalunya, Barcelona, Spain

<sup>4</sup>WeCare Chair: End-of-life Care, Universitat Internacional de Catalunya, Barcelona, Spain

<sup>5</sup>Escola d'Infermeria Gimbernat, Universitat Autònoma de Barcelona, Barcelona, Spain

<sup>6</sup>Department of Psychology, University of Munich, Munich, Germany

\*Correspondence to:

School of Medicine and Health Sciences, Universitat Internacional de Catalunya, Josep Trueta s/n, 08195 Sant Cugat del Vallès, Barcelona, Spain.  
E-mail: abalaguer@uic.es

## Abstract

**Background:** Qualitative research suggests that the wish to hasten death (WTHD) in the advanced stages of disease is mainly related to overall suffering. This quantitative study explores the relationship between the WTHD and psychological and physical factors, including survival, in patients with advanced cancer.

**Methods:** Cross-sectional study of 101 advanced cancer patients admitted to an acute Palliative Care Unit (PCU) and followed-up for survival. Patients were assessed using the Schedule of Attitudes toward Hastened Death (SAHD), The Hospital Anxiety and Depression Scale (HADS), Eastern Cooperative Oncology Group Performance Status, and the Barthel Index were used to assess psychological and physical status. Survival prognosis was based on the Palliative Prognostic score.

**Results:** The Spanish adaptation of SAHD showed good psychometric properties (Cronbach's alpha 0.92; similar concurrent/discriminant validity to the original). The mean total score on SAHD was 4.9 (standard deviation [SD]=5.3). SAHD scores were positively correlated with HADS-Total ( $r=0.332$ ,  $p<0.01$ ), HADS-Depression ( $r=0.397$ ,  $p<0.01$ ), Eastern Cooperative Oncology Group Performance Status ( $r=0.276$ ,  $p<0.01$ ), and Palliative Prognostic score ( $r=0.248$ ,  $p<0.05$ ) and negatively correlated with the Barthel Index ( $r=-0.324$ ,  $p<0.01$ ). Women scored higher than men on SAHD (6.2, SD = 5.9 vs. 4.2, SD = 4.8,  $p<0.01$ ). No association was found between WTHD and survival ( $r=-0.12$ ,  $p>0.05$ ).

**Conclusions:** Both psychological and physical impairment (as well as poorer prognosis) are associated with higher scores on SAHD, supporting the idea that WTHD emerges in response to overall suffering. Although we observed a direct relationship between physical status and survival, the latter was not related to any of the psychological factors or WTHD.

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## Introduction

Patients in the advanced stages of disease sometimes express the wish to hasten death (WTHD) [1,2]. Various qualitative studies have shown that WTHD in patients is influenced by numerous factors related to overall suffering [2–6]. Although there is a broad assumption that the severity of the illness or a worse prognosis may be associated with more WTHD, there is no actual evidence for this. Hence, we decided to study WTHD in patients with advanced cancer, shortly after an exacerbation. Our main goal was to assess the association between WTHD and physical and psychological factors and to evaluate the potential relationship between WTHD and survival.

The WTHD phenomenon has attracted increasing interest, especially in the palliative care context [3,7,8]. However, studies of WTHD face a number of challenges, because such

a wish may not remain constant over time, and the concept itself can be difficult to define [1,9,10]. Indeed, the term 'wish to hasten death' has been used to refer to situations that, although related, should actually be distinguished from one another, including when they co-occur, as they represent quite different motivational states. Examples would be the acceptance of death or a vague wish to die [11].

Although some researchers have focused their attention on WTHD as a precursor to requests for euthanasia or physician-assisted suicide [9,12], others have sought to develop a better understanding of WTHD and its role in the suffering that can be related to it [1,13]. By studying the emergence of such a wish, it is also possible to take into account its intensity, thereby enabling a more precise description of its nature and variability [14]. In this context, a recent meta-ethnography by our group [15] highlighted how WTHD may have an additional meaning for patients

over and above a pure wish to take their life. These meanings relate to aspects such as the losses resulting from the illness (e.g., loss of meaning in life), a fear of the dying process, and the wish to retain some control. This study also found support for the idea that WTHD emerges in response to overwhelming emotional distress, a consequence of multifaceted suffering involving psychological, spiritual, and social elements [15].

Although the quantitative approach to this complex phenomenon has some limitations, it is clearly important to find ways of quantifying WTHD and to develop instruments that can assess its intensity and frequency so as to enable comparisons between individuals and populations. Currently, the most widely used scale for evaluating WTHD is the Schedule of Attitudes toward Hastened Death (SAHD), developed by Rosenfeld *et al.* [13]. SAHD was validated originally in a population of individuals with AIDS [14], and subsequently in a sample of terminally ill cancer patients [13], showing good reliability and validity in both cases. SAHD has since been widely used to measure the desire for hastened death among both hospitalized [7,16] and ambulatory cancer patients [17]. However, SAHD has yet to be validated in a Spanish population. Furthermore, there is a lack of studies exploring the potential association between WTHD and survival among advanced cancer patients.

In light of the preceding texts, the present study aimed the following: (a) to examine the validity and reliability of the Spanish form of SAHD in a sample of hospitalized patients with advanced cancer, (b) to explore the correlations between SAHD scores and psychological factors such as depression and anxiety, (c) to assess the correlation between SAHD scores and physical factors such as dependency and performance status, and (d) to assess the potential relationship between WTHD, as measured by SAHD, and survival rates.

## Materials and methods

### Subjects

We enrolled advanced cancer patients admitted to an acute PCU. In order to be eligible for inclusion, patients had to be aged 18 years or older, no present severe cognitive impairment (score <5 on the short portable mental status questionnaire (SPMSQ)) [18], be able to communicate adequately with research personnel, be aware of their diagnosis, to have been informed by their physician of the incurable nature of their illness, and to have signed the informed consent form. A further consideration was that the interview would only be conducted if there was a consensus in the clinical care team that administration of SAHD would not be a cause of significant, additional emotional distress for the patient concerned. The exclusion criteria were having a disorder of a psychotic nature

and/or a physical or psychological status that was deemed by clinical opinion to be too delicate to allow inclusion. Participants were recruited between June 2010 and July 2012 from among patients admitted to an acute PCU of Barcelona. Of the 717 patients initially assessed, 56 were too sick to enroll, 376 were considered to be emotionally distressed according to the clinical judgment of two medical staffs, and 161 declined to participate. These patients, along with the remaining 124 who were enrolled in the study, received psychological support in accordance with the protocol established by our psycho-oncology department. All the included patients were recruited within 48 h of their admission to the unit, with the various instruments being administered between the fifth and seventh day of admission. Of the 124 patients enrolled in the study, two (1.6%) immediately declined to continue. Ten (8%) patients opted to withdraw during the interview process, while in the case of a further 11 (8.5%) a deterioration in their clinical condition prevented the interview from being conducted. The remaining 101 patients completed the assessment questionnaires. No patient was excluded on the basis of SPMSQ score. The study was approved by the corresponding ethics committee.

### Variables

The Spanish version of SAHD (SAHD-Sp) was developed using the translation and back-translation procedure, as recommended by the *Scientific Advisory Committee of the Medical Outcomes Trust* [19].

Sociodemographic data were gathered, and cognition was assessed using the SPMSQ [18]. Psychological status was evaluated using the Spanish version of the Hospital Anxiety and Depression Scale (HADS) [20]. Functional (physical) status was assessed according to Eastern Cooperative Oncology Group Performance Status (ECOG-PS) [21] and the Barthel Index [22], whereas survival prognosis was based on the Palliative Prognostic (PaP) score [23]. The SAHD-Sp (Appendix A) was administered to all patients. SAHD [13] includes 20 dichotomous (true/false) items that are scored as either 0 or 1, and the higher the score, the greater the desire to hasten death. All instruments were administered by the same member of the research team (CV).

### Statistical analysis

As in previous studies, SAHD scores were heavily skewed, and nonparametric tests were therefore used in the statistical analysis: Spearman's rho to determine the association between quantitative variables and the Mann-Whitney *U* and Kruskal-Wallis tests for the comparison of means. The factor structure of the scale was assessed by means of principal components analysis with orthogonal Varimax rotation. The most suitable factor solution was determined on the basis of the eigenvalues, the percentage of explained variance, and

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through examination of the scree plot. All statistical analyses were performed using SPSS 21.0 for Windows.

### Results

One hundred and one patients completed the assessment questionnaires. Table 1 shows their demographic and clinical characteristics. There were no significant differences in SAHD scores with respect to any of these sociodemographic or clinical variables, with the exception of gender.

#### Validation of the Spanish version of the Schedule of Attitudes toward Hastened Death

The reliability (internal consistency) of SAHD-Sp was assessed by calculating Cronbach's coefficient of internal

**Table 1.** Demographic and clinical characteristics of the sample

|                           | <i>n</i>   | Percentage |
|---------------------------|------------|------------|
| Gender                    |            |            |
| Male                      | 62         | 61.4       |
| Female                    | 39         | 38.6       |
| Age                       |            |            |
| Mean (SD) [range]         | 61.7 (±11) | [33–84]    |
| Marital status            |            |            |
| Single                    | 11         | 10.9       |
| Married/common law        | 81         | 80.2       |
| Separated/divorced        | 9          | 8.9        |
| Family situation          |            |            |
| Lives alone               | 9          | 8.9        |
| Lives with partner/family | 44         | 43.6       |
| Lives with a caregiver    | 35         | 34.7       |
| Lives in an institution   | 7          | 6.9        |
| Other                     | 6          | 5.9        |
| Education                 |            |            |
| Primary education         | 19         | 18.9       |
| Secondary education       | 64         | 63.4       |
| Higher education          | 18         | 17.7       |
| Nationality               |            |            |
| Spanish                   | 95         | 94.1       |
| Other                     | 6          | 5.9        |
| Pfeiffer Score (SPMSQ)    |            |            |
| No errors in responses    | 73         | 72.2       |
| One error                 | 15         | 14.8       |
| Two errors                | 9          | 8.9        |
| Three errors              | 4          | 4.1        |
| Cancer Diagnosis          |            |            |
| Lung                      | 22         | 21.8       |
| Colon                     | 14         | 13.9       |
| Gastric                   | 11         | 10.9       |
| Pancreas                  | 9          | 8.9        |
| Other                     | 45         | 44.5       |
| Date of diagnosis         |            |            |
| < 1 year ago              | 17         | 16.8       |
| 1–3 years ago             | 44         | 44.6       |
| 3–5 years ago             | 14         | 13.9       |
| >5 years ago              | 25         | 24.7       |

SD, standard deviation; SPMSQ, short portable mental status questionnaire.

consistency, which yielded an alpha value of 0.92. The item-total correlation coefficients ranged between 0.22 and 0.80, although only two items had an item-total correlation of <0.30.

Discriminant validity was estimated by calculating the correlations between SAHD scores and the other measures used. Table 2 shows the Spearman's rho correlation coefficients between SAHD and the measures of anxiety (HADS-A) and depression (HADS-D), HADS-Total, the PaP score, the Barthel Index, ECOG-PS, and survival days. Correlations were positive and significant between the SAHD and the HADS-D ( $p < 0.01$ ), HADS-Total ( $p < 0.01$ ), PaP score ( $p < 0.05$ ), and ECOG-PS ( $p < 0.01$ ) and negative and significant between SAHD and the Barthel Index ( $p < 0.01$ ). The correlations between SAHD and survival days and between SAHD and HADS-A did not reach statistical significance ( $p > 0.05$ ).

The principal components analysis yielded four factors with eigenvalues greater than 1. However, examination of the scree plot (Figure 1), the factor loadings of various alternative solutions, and the high percentage of variance explained by the first factor (44.0%) indicated that the scale was basically unidimensional.

The mean total score on SAHD in this sample of palliative care patients was 4.9 (standard deviation (SD) = 5.3; range 0–19; maximum possible score = 20). SAHD scores were positively skewed, with 59.4% of patients scoring 3 or less, 23.8% scoring between 3 and 10, and the remaining 16.8% scoring over 10. The most frequently endorsed items were item 17: 'I expect to suffer a great deal from physical problems in the future because of my illness', which was endorsed as true by 63 patients (62.4%), and item 2: 'I expect to suffer a great deal from emotional problems in the future because of my illness', endorsed as true by 46 patients (45.5%).

#### Association between psychological factors and the wish to hasten death

Table 3 shows descriptive data for all the instruments used, both for the sample as a whole and by gender. It can be seen that there were only significant differences between the scores of men and women on SAHD ( $Z = -2.10$ ;  $p < 0.05$ ), HADS-Total ( $Z = -2.17$ ;  $p < 0.05$ ), and HADS-D ( $Z = -2.01$ ;  $p < 0.05$ ).

The means and SDs for SAHD scores according to the three HADS-D groups proposed by the scale's author are shown in Table 4. It can be seen that SAHD scores increase in line with HADS-D scores. The means in the three groups were significantly different from one another ( $\chi^2 = 15.51$ ;  $p < 0.01$ ).

#### Wish to hasten death and physical status and survival

All patients in the sample were also followed-up in order to determine how many days they survived subsequent

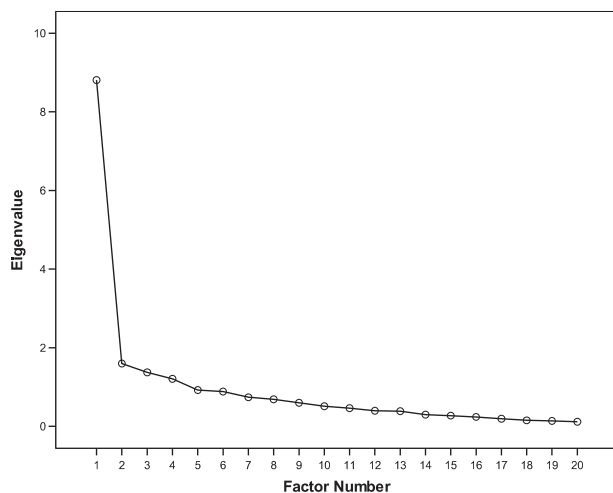
**Table 2.** Spearman's rho coefficients for SAHD in relation to the measures of anxiety (HADS-A) and depression (HADS-D), the Barthel Index, ECOG-PS, and PaP score

|      | Psychological aspects |         |            | Physical aspects |         |               | Prognosis |
|------|-----------------------|---------|------------|------------------|---------|---------------|-----------|
|      | HADS-A                | HADS-D  | HADS-Total | Barthel          | ECOG-PS | Survival days | PaP score |
| SAHD | 0.148                 | 0.397** | 0.332**    | -0.324**         | 0.276** | -0.123        | 0.248*    |

SAHD, Schedule of Attitudes toward Hastened Death; HADS-A, Hospital Anxiety and Depression Scale–Anxiety; HADS-D, Hospital Anxiety and Depression Scale–Depression; ECOG-PS, Eastern Cooperative Oncology Group Performance Status; PaP, Palliative Prognostic.

\* $p < 0.05$ .

\*\* $p < 0.01$ .

**Figure 1.** Scree plot of the factor loadings for the Schedule of Attitudes toward Hastened Death

to the interview. For the 91 patients who had died by the end of the study period, mean survival was 63.3 days (SD=80.6), with a median of 30 and a range of 2–340 days. The mean survival days and SAHD score in each of the three PaP score groups are shown in Table 5 (PaP groups A (score 0–5.5), B (5.6–11.0), and C (11.1–17.5), corresponding to 30-day survival probabilities of >70%, 30–70%, and <30%, respectively). It can be seen that the mean survival decreases in line with worsening prognosis,

the differences between the three groups being significant ( $p < 0.01$ ). Note also that SAHD scores increased as the patient's clinical status worsened, with the differences between PaP score groups once again being significant ( $p < 0.01$ ). Taking the median survival of 30 days as a reference point, patients who survived  $\geq 30$  days had a lower but not significant SAHD score than did those who survived <30 days (mean 4.3 (SD=4.7) vs. 5.7 (SD=5.61),  $p > 0.05$ , respectively).

## Discussion

With regard to our first goal, this study of palliative care patients with advanced cancer indicates that SAHD-Sp has adequate psychometric properties and a unidimensional factor structure, as in previous reports [13,14,24,25]. The instrument also showed acceptable internal consistency. In fact, the alpha value obtained (0.92) is the highest reported to date (original English version,  $\alpha = 0.89$  in patients with AIDS [14] and  $\alpha = 0.88$  in cancer patients [13]; in Greek palliative care patients,  $\alpha = 0.89$  [24]; in Korean cancer patients,  $\alpha = 0.66$  [25]). The Spanish adaptation also yielded similar indices of concurrent and discriminant validity to those obtained previously. SAHD was shown to correlate with variables that refer both to physical aspects (functional status, dependency, and prognostic factors) and psychological ones (anxiety and depression).

**Table 3.** Means, standard deviations (SD), and ranges for scores on the Schedule of Attitudes toward Hastened Death (SAHD), HADS (Total, HADS-A, and HADS-D), ECOG-PS, Barthel Index, and Palliative Prognostic (PaP) score, as well as survival days, both overall and separately for men and women

| Measure         | Mean (SD)     | Range  | Men mean (SD) | Women mean (SD) | Mann-Whitney U        |
|-----------------|---------------|--------|---------------|-----------------|-----------------------|
| SAHD            | 4.99 (5.30)   | 0–19   | 4.23 (4.80)   | 6.21 (5.91)     | $Z = -2.10, p < 0.05$ |
| HADS-Anxiety    | 6.24 (3.93)   | 0–19   | 5.71 (3.41)   | 7.08 (4.56)     | $Z = -1.48, ns$       |
| HADS-Depression | 7.62 (4.52)   | 1–20   | 6.85 (4.04)   | 8.85 (5.00)     | $Z = -2.01, p < 0.05$ |
| HADS-Total      | 13.86 (6.98)  | 2–36   | 12.56 (6.26)  | 15.92 (7.64)    | $Z = -2.17, p < 0.05$ |
| ECOG-PS         | 2.17 (0.95)   | 0–4    | 2.11 (0.93)   | 2.26 (0.99)     | $Z = -0.83, ns$       |
| Barthel Index   | 59.80 (25.63) | 5–100  | 61.61 (25.11) | 56.92 (26.49)   | $Z = -0.67, ns$       |
| PaP score       | 6.65 (5.65)   | 0–17.5 | 6.66 (5.66)   | 6.64 (5.74)     | $Z = -0.11, ns$       |
| Survival days   | 63.34 (80.62) | 2–340  | 69.29 (91.24) | 52.88 (57.24)   | $Z = 0.11, ns$        |

HADS, Hospital Anxiety and Depression Scale; ECOG-PS, Eastern Cooperative Oncology Group Performance Status.



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**Table 4.** Mean SAHD score corresponding to each of the three subgroups defined according to scores on HADS-D

|                | HADS-D1 (n = 16) | HADS-D2 (n = 22) | HADS-D3 (n = 63) | Kruskal–Wallis chi-squared | Significance (p) |
|----------------|------------------|------------------|------------------|----------------------------|------------------|
| SAHD mean (SD) | 3.17 (SD = 3.27) | 4.43 (SD = 4.89) | 9.12 (SD = 6.73) | 15.51                      | p < 0.01         |

SAHD, Schedule of Attitudes toward Hastened Death; SD, standard deviation; HADS-D, Hospital Anxiety and Depression Scale–Depression.  
HADS-D1: score 0–7; HADS-D2: score 8–10; HADS-D3: score ≥ 11.

**Table 5.** SAHD scores and days of survival (mean and SD) for each of the three groups defined according to the Palliative Prognostic score

|               | PaP group A [score 0–5.5]<br>(n = 47) | PaP group B [score 5.6–11.0]<br>(n = 31) | PaP group C [score 11.1–17.5]<br>(n = 19) | Kruskal–Wallis | Significance (p) |
|---------------|---------------------------------------|--|---|----------------|------------------|
| Survival days | 93.54 (98.22)                         | 47.46 (60.66)                            | 15.83 (19.11)                             | 23.38          | p < 0.01         |
| SAHD          | 4.02 (4.93)                           | 5.06 (5.15)                              | 8.11 (5.86)                               | 8.60           | p < 0.01         |

SAHD, Schedule of Attitudes toward Hastened Death; SD, standard deviation.

Although the mean SAHD score for this sample can be considered low (4.9, SD = 5.3), it is slightly higher than the figure reported by Rosenfeld *et al.* [13] with cancer patients in New York (4.7, SD = 4.3). In both that study and our own, a high percentage of patients scored >10 on SAHD (16.8% and 18.3%, respectively). This contrasts with the corresponding figure reported in the original study by Rosenfeld *et al.* [14], in a sample of individuals with AIDS (6% of whom scored over 10 on SAHD), and in the study by Mystakidou *et al.* [24] of terminally ill cancer patients (5% scored over 10). The apparently greater WTHD among our patients could be due to the nature of the sample, namely, advanced cancer patients admitted to a PCU due to acute worsening of their symptoms.

In the present sample, gender was the only sociodemographic variable that influenced SAHD scores, which were higher among women. Our female patients also scored significantly higher than males on anxiety and depression, a phenomenon previously described in the literature [26]. In contrast to our findings, sociodemographic variables other than gender have previously been related to SAHD scores. For example, some studies have found an association between Caucasian ethnicity and higher scores [1,13,14], whereas a Korean study reported higher scores with increasing age [25].

The second goal was to explore the correlations between SAHD scores and psychological factors. Some authors [1,27–29] have highlighted the relationship between WTHD and depression. In this regard, we found that the mean SAHD score increased progressively in line with scores on HADS-D (Table 4), with the differences being statistically significant. While acknowledging the importance of treating any depressive disorder, it is not always possible in clinical practice to distinguish between what has been termed ‘overall emotional distress’ (i.e., feelings of depression, anxiety, and hopelessness) and a genuine clinical

depression [30]. Nonetheless, our results do highlight the need for early detection of emotional distress and depression, which could perhaps be achieved through routine application of Endicott criteria [31].

In terms of physical factors such as the degree of dependency and functional status, our study corroborates previous findings of a direct relationship between WTHD and greater functional impairment, dependency, and loss of autonomy [1,7,24,32]. This highlights the relevance of exploring a possible WTHD in patients who have become notably impaired in these areas. The present findings also support the conclusions drawn in our previous meta-ethnographic study.

As regards the possible relationship between WTHD and how long patients subsequently survived, we observed no significant correlation between SAHD scores and the number of survival days ( $r = -0.12$ ,  $p > 0.05$ ). This is consistent with the results of Rodin *et al.* [7], who using the same instruments found no relationship ( $r = -0.10$ ,  $p > 0.05$ ) between WTHD and survival in a large sample of cancer patients, albeit at a less advanced stage than were ours. We also found no significant correlations between anxiety (HADS-A), depression (HADS-D), and survival. However, significant correlations were observed between the number of survival days and scores on the Barthel Index and ECOG-PS. These results suggest that survival, at least in these most advanced stages of disease, is more related to physical factors than to factors of a psychological nature, even though all these aspects are interrelated.

There is, of course, controversy as to the possible influence of emotional distress on the survival of cancer patients [33]. Some studies of advanced cancer patients have associated depressive symptoms with shorter survival times [34,35], although there appears to be no relationship with disease progression [36]. Although we observed a trend towards longer survival in those patients who scored 10 or less on HADS-D, this difference was not significant.

In advanced cancer patients, prognostic tools are often used to predict survival [33,37,38]. One of the most widely employed tools in our setting is the PaP score, which can reliably estimate the likelihood of the patient surviving over the next 30 days [23]. In the present sample, PaP scores were related to survival, and we also observed significant differences between patients after stratifying them according to three PaP score groups (Table 5). Comparison of SAHD scores obtained by these three PaP groups also revealed significant differences, with lower PaP scores being associated with a stronger WTHD. This also highlights the relationship between WTHD and 'physical' variables, because the PaP score also evaluates the patient's clinical status.

Although the present results support the validity and reliability of SAHD-Sp in patients with advanced cancer, the study has some limitations that need to be considered. First, the sample comprised advanced cancer patients in an acute PCU who were selected by means of convenience sampling. For ethical reasons, only those patients who were considered by medical opinion to be well enough to respond to the different questionnaires were included. The instrument may not, therefore, have the same validity among patients at other disease stages or in those who do not receive the same level of care as was offered in this unit. Second, we were unable to establish the temporal stability of the instrument, because of the short mean stay in the unit and the high mortality rate. Third, the cross-sectional observational design means that causal relationships cannot be established between the study variables. Conversely, the strength of the study is that all the data were gathered by the same member of the research team, thereby reducing data collection bias.

With regard to the application of SAHD in the Spanish population, an issue that needs further consideration is the direct wording of its items. In Mediterranean cultures, communicating with patients at the end of their lives is generally regarded as a difficult task, and speaking openly about the possibility of survival or death is often avoided or broached only in a delicate fashion [39,40]. This issue was raised with the two ethical committees (health and research) of our institution, and an anonymous questionnaire was circulated among the clinical staff in our unit. Of the 15 people surveyed, 10 stated that patients would need quite much preparation before responding to the scale, whereas the other 5 said that much preparation would be needed. As regarding how easy the scale was to administer, 10 of the 15 staff members said that it was difficult or very difficult because of the direct language it used. In their comments, they also expressed concern that administration of the scale might be distressing to patients. In order to minimize this risk, all our patients were given advance preparation by the same member of the research team, who also chose the most suitable moment to administer the

scale. Furthermore, the impact of the questionnaire was carefully monitored by asking the patient two questions (in a Likert format) about any distress that was caused by having to respond to the scale and the importance of the questions asked. Ninety eight percent of patients stated that the questions did not cause them any distress at all and 93.1% said that the questions were necessary or very necessary. Although these data indicate that no additional distress was caused to patients by SAHD administration, it should be remembered that the enrolled patients were carefully selected among potential participants, with care being taken to choose the right moment for the interview. Furthermore, patients received adequate preparation and protocolized psychosocial support throughout the study and their time in the unit. Concerns about the applicability of the questionnaire in the clinical setting have previously been raised by Voltz *et al.* [41] in a German population. This issue may explain, at least in part, why only a small percentage of eligible patients were finally enrolled, this being a feature not only of the present study but also of previous research that has used the same instrument in other populations (22% of eligible patients enrolled in a US study [13] and 15% in a German sample [41]).

Another potential limitation of the instrument concerns the extent to which it can really distinguish between a genuine WTHD and the conscious acceptance that one's life will soon end. This limitation, which is due to the complex nature of WTHD construct, was acknowledged by the scale's authors [1], who noted that several of its items were ambiguous in this regard; consequently, and in an attempt to reduce potential confusion with an acceptance of death, they proposed a cutoff score of 10 as being indicative of 'high WTHD'.

By way of a conclusion, we would like to highlight the following points. First, SAHD-Sp presented in this article is shown to be a valid and reliable instrument for studying WTHD in palliative care patients in the advanced stages of disease. However, it may present certain limitations in terms of its ability to discriminate between an acceptance of death and a genuine wish to hasten it, and its administration in Mediterranean populations needs to take into account the language used in the item statements.

Second, both physical and psychological impairment (as well as poor prognosis, measured by the PaP score) are shown to be associated with WTHD, and this supports the idea that such a wish emerges in response to overall suffering. This highlights the need, in clinical settings, to explore the possibility of an implicit WTHD in those patients with serious impairment of this kind and to ensure that they receive the care required to minimize any associated suffering.

Finally, and as expected, we observed a direct relationship between physical status and survival, although the latter was not, in our patients, associated with WTHD or with other psychological aspects.

**Appendix A. Spanish form of the Schedule Attitudes toward Hastened Death (SAHD):**

|  |   |   |
|--|---|---|
| 1. Confío en que podré afrontar el estrés emocional de mi enfermedad.  | V | F |
| 2. Creo que en el futuro tendré muchos problemas emocionales por culpa de mi enfermedad.                           | V | F |
| 3. Mi enfermedad me ha agotado tanto que ya no deseo seguir viviendo.  | V | F |
| 4. Estoy pensando seriamente pedir a mi médico que me ayude a poner fin a mi vida.                                 | V | F |
| 5. A menos que mi enfermedad mejore, pensaré en tomar medidas para poner fin a mi vida                             | V | F |
| 6. La muerte me parece la mejor forma de librarme del dolor y malestar que me causa mi enfermedad.                 | V | F |
| 7. A pesar de mi enfermedad, mi vida aún tiene un objetivo y un significado.                                       | V | F |
| 8. Me importa poco el tratamiento, lo que quiero es que la enfermedad siga su curso.                               | V | F |
| 9. Quiero continuar viviendo a pesar del dolor sufrimiento que me cause mi enfermedad.                             | V | F |
| 10. Espero que mi enfermedad progrese rápidamente, porque prefiero morir a continuar viviendo con esta enfermedad. | V | F |
| 11. He dejado el tratamiento, porque prefiero dejar que la enfermedad siga su curso.                               | V | F |
| 12. Me gusta mi vida y no pienso en ponerle fin a pesar de mi enfermedad.  | V | F |
| 13. Debido a que mi enfermedad no tiene curación prefiero morir lo antes posible.                                  | V | F |
| 14. La muerte me parece la mejor forma de librarme del sufrimiento emocional que me causa mi enfermedad            | V | F |
| 15. Los médicos serán capaces de aliviarme gran parte del malestar que me causa mi enfermedad.                     | V | F |
| 16. Debido a mi enfermedad, la idea de morir me parece reconfortante.  | V | F |
| 17. Creo que en el futuro sufriré muchos problemas físicos debido a mi enfermedad.                                 | V | F |
| 18. Cuando la enfermedad me sea insostenible tengo pensado acabar con mi vida.                                     | V | F |
| 19. Busco con todas mis fuerzas todos los tratamientos posibles, haré cualquier cosa para seguir viviendo          | V | F |
| 20. Soy capaz de afrontar los síntomas de mi enfermedad y no pienso en poner fin a mi vida.                        | V | F |

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**Conflict of interest**

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