

# Can Addressing Death Anxiety Reduce Health Care Workers' Burnout and Improve Patient Care?

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**Abstract /** Death anxiety may interfere with health care workers' (HCWs) relationships with patients and patients' families and increase HCWs' levels of burnout. This study shows the impact of a six-day course for HCWs that provided training in communication, in offering emotional and spiritual support to patients, and in personal introspection on death anxiety. The HCWs were given questionnaires to evaluate their level of burnout, personal well-being, and death anxiety as well as the quality of their relationships with patients before the course and four months after it. There were 150 study participants, all HCWs involved in caring for dying patients (85 in palliative care units and 65 in other settings). There was a control group of 26 HCWs who cared for the dying in settings other than palliative care units. The results show that the course appeared to lead to a significant reduction in levels of burnout and death anxiety; they also indicated an increase in personal well-being and professional fulfillment, and participants perceived an improvement in the quality of their relationships with patients and patients' families.

**Résumé /** L'angoisse de la mort peut être source d'anxiété pour les travailleurs de la santé et peut entraver leur relation de soignant avec les patients et leur famille tout comme elle peut augmenter leur niveau d'épuisement professionnel. Cette étude démontre l'impact, sur les travailleurs de la santé, d'une formation de six jours portant sur la communication, le support psychologique et spirituel auprès des patients, et la prise de conscience personnelle de leur anxiété face à la mort. Les participants devaient remplir un questionnaire avant que ne débute le cours et quatre mois après afin d'évaluer leur niveau d'épuisement, leur sentiment de bien-être personnel, leur angoisse de la mort, et la qualité de leur relation d'aide. Tous les 150 participants travaillaient auprès des mourants, 85 d'entre eux dans des services de soins palliatifs et 65 dans des services variés. Par ailleurs, 26 autres travailleurs de la santé oeuvrant auprès des mourants dans des services autres que les soins palliatifs ont

servi de groupe contrôle. Les résultats démontrent que la formation semble avoir résulté en une diminution significative du niveau d'épuisement et de l'angoisse de la mort. On a noté également une augmentation sensible du niveau de bien-être personnel et professionnel. Dans l'ensemble, les travailleurs de la santé ont remarqué que la qualité de leur relation d'aide avec les malades et leurs familles s'était sensiblement améliorée.

## INTRODUCTION

Research has shown that health care workers (HCWs) who care for the dying can suffer from death anxiety. This can lead to burnout and in turn affect the quality of patient and family care (1-4). The underlying causes may be HCWs' own fear of death, feelings of inadequacy, insufficient understanding of the needs of the dying, and difficulties in communicating (1, 3).

Death anxiety has been defined as "a negative emotional reaction provoked by the anticipation of a state in which the self does not exist" (5, p.345). It has also been suggested that the fear expressed by the dying may be the same type of fear that people experience "in everyday life rather than in acute situations where there are immediate threats to life...[It] has multiple components including: anticipating [oneself] dead, fear of the process of dying and fear about the death of significant others" (6, p.701). Other such daily-life fears may include: fear of pain and suffering, fear of being alone and of not having close and fulfilled relationships, fear of living with uncertainty, fear of the unknown, fear of not living a meaningful life, fear of physical degradation, fear of losing one's dignity and being judged by others, and fear of what comes after death (7). Lack of awareness of the existence of these fears in their own lives may lead HCWs to experience feelings of anxiety when caring for dying patients, which can in turn interfere with the HCW-patient relationship (3, 8).

Burnout has been defined as “a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment that can occur among individuals who work with other people in some capacity” (9 p.192). HCW burnout and death anxiety can affect patients, institutions, and HCWs themselves in many ways. It can lead to poor quality of care, increased absenteeism and job turnover, and personal dysfunction (physical exhaustion, insomnia, increased use of alcohol and drugs, and marital and family problems) (9).

There is little research on the effectiveness of learning to cope with death anxiety and how this anxiety can affect patient care and burnout, but some previous research has focused on ways of addressing the root causes of burnout and on improving patient care through a mix of educational and emotional support strategies (10-13). HCWs have been shown to benefit from various types of education, including instruction in how to maintain awareness of the emotional aspects of dealing with suffering. As such, it has been suggested that to enable HCWs to help patients on an emotional and spiritual level, it is not sufficient to simply educate them about the patients. HCWs also need to learn how to get in touch with their deeper selves and to be aware of their own spiritual beliefs (12); “clinicians need to pay attention to their own spiritual histories and to be conscious of how this affects the care they give their patients” (14, p.31). Thus, it would seem that one must recognize one’s own fear of death and suffering before one can recognize that of others.

We undertook our research within a therapeutic setting using a course that addressed both patient care and the emotional aspects of HCWs’ fears of death and dying. We focused on determining whether learning to cope with death anxiety and attaining a deeper understanding of patients’ emotional and spiritual needs combined with better communication could reduce burnout in HCWs and improve patient care. This was part of a larger mixed-methods study looking at these issues.

The hypothesis was that as a result of this increased self-awareness and understanding of patient issues, HCWs would experience a significant reduction in their levels of burnout and death anxiety and an increase in their levels of personal and professional well-being. This, in turn, would have a positive influence on their relationships with patients and patients’ families.

## METHODOLOGY

### Design

A mixed-methods approach was used. Three questionnaires were employed to evaluate the quality of participants’ helping relationship with

patients, their level of burnout, and their level of well-being on two occasions: immediately before training (time 1), and four months after training (time 2). Death anxiety was also assessed using one factor from the quality of helping relationship questionnaire and four factors from the level of well-being questionnaire. Further qualitative analysis was undertaken of the free comments from the questionnaires and of data from the interviews and focus groups. These results will be presented elsewhere. The training was given in institutions that care for terminally ill patients in different parts of Portugal, and the HCWs were free to either participate or not — thus, they were not randomly chosen.

A control group of 26 HCWs working with dying patients but not in palliative care units was also studied and received the same questionnaires at both time intervals. This group received no training between the two questionnaires. The experimental group working with dying patients but not in palliative care units received the training course mentioned earlier. No control group was used in the case of the HCWs working in palliative care units as it was not possible to ensure that they received no other palliative care training between time 1 (T1) and time 2 (T2).

The independent variable was the training course and the dependent variables were the participants’ levels of burnout, quality of helping relationship, personal well-being, and death anxiety. Results were also considered in relation to the participant’s age, profession, and workplace. Gender was not considered, as 89 percent of the group was female.

### Participants

The training course participants were 150 HCWs working in Portugal. Their ages ranged from 21 to 67. There were 87 nurses (58 percent), 30 nursing aides (20 percent), 12 psychologists (8 percent), 8 doctors (5 percent), and 13 HCWs of other professions (9 percent) (social workers, physiotherapists, chaplains, nutritionists, and occupational therapists). In all, 134 (89 percent) were female and 16 (11 percent) were male. A total of 85 (57 percent) worked in palliative care units, and 65 (43 percent) worked with dying patients but not in a palliative care unit.

There were 26 participants in the control group, and they ranged in age from 22 to 54. They worked with oncology patients, but not in a palliative care unit. Of these, 23 (88 percent) were nurses and 4 (12 percent) were nursing aides. The control group was limited because only 26 of 99 people completed the questionnaires in both T1 and T2; 99 HCWs filled in the initial three ques-

tionnaires, but only 26 made themselves available to fill in the questionnaires four months later. Moreover, although the control group participants were involved in caring for people with a life-threatening illness, they were not working in palliative care units. Therefore, of the 150 participants, only 65 — those caring for the dying but not in a palliative care unit — were comparable to the control group.

### Procedure and Materials

HCWs in nine units working with terminally ill patients were offered a course devised by Hermine Aitken (15), and 208 chose to participate. Ethics approval was obtained from the hospitals involved and from the University of Kent. The course was 36 hours in duration divided into two 18-hour modules over 6 days. The first module was conducted in a group therapy format to facilitate personal introspection on death anxiety; the approach was changed, with Aitken's consent, from a psychoanalytical one to the person-centred approach practised by the facilitator (16) by removing certain exercises that were not congruent with the person-centred approach. Participants were given space to reflect on the quality of their personal relationships, the meaning of their lives, their coping mechanisms when faced with suffering and the unknown, and the prospect of their own ageing and physical degradation. The aim was not only to help HCWs to better understand their own personal issues but also to improve their capacity to empathize with patients, as these existential issues also affect the dying.

The second module covered theoretical information and involved practical exercises for improving communication skills and understanding the psychological and spiritual needs of dying patients. The course was given to 29 groups with an average of 7 participants each. The first module was offered by a psychologist trained in person-centred therapy and the second by a trained holistic health counsellor.

Three questionnaires were given to the participants one week before the course began. The participants returned the completed questionnaires at the start of the first day of the course, and they returned the next set four months after the course ended. It took three months to collect all the post-training questionnaires; 150 complete sets of questionnaires were received.

The questionnaire on burnout was devised by the author (CGM) to measure emotional exhaustion, depersonalization, and personal fulfillment specifically in HCWs who care for the dying, as opposed to HCWs in general. The questions had different origins: 21 were from the Maslach

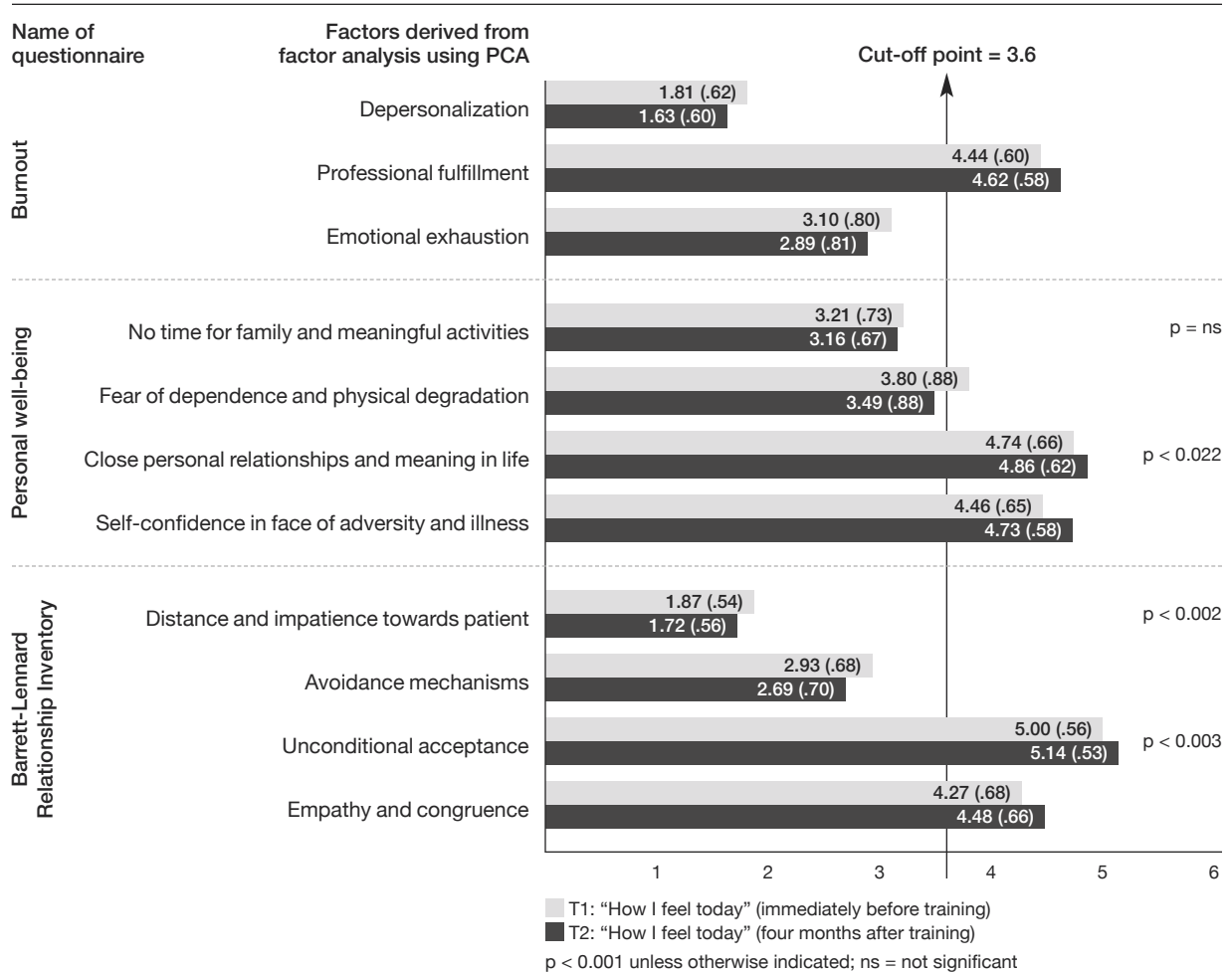
Burnout Inventory (9), 5 were from PsychTests Aim Inc. (17), and 14 were designed by CGM. The Barrett-Lennard Relationship Inventory (18, 19) was used to measure the quality of the helping relationship between HCWs and patients; dimensions measured were positive regard, empathy, unconditional acceptance, and congruence.<sup>1</sup> A questionnaire to evaluate the respondent's personal sense of well-being was constructed with original questions by CGM. It assessed the quality of personal relationships, fear of dealing with the unknown, fear of being judged and losing dignity, fear of not finding meaning in life, and fear of physical degradation and pain.

Construct validation (principal components analysis) was performed and internal consistency (Cronbach's alpha) was assessed using scores from 280 questionnaires completed by HCWs who care for the dying (the results will be presented as a separate publication). This validation confirmed that for this population, the questionnaires measured the following concepts: the burnout questionnaire measured professional fulfillment (alpha C 0.83), emotional exhaustion (alpha C 0.86), and depersonalization (alpha C 0.69); the helping relationship questionnaire measured capacity to empathize and feel congruent (alpha C 0.82), unconditional acceptance and positive view of the patient (alpha C 0.78), avoidance mechanisms toward the patient (alpha C 0.71), and distance and impatience toward the patient (alpha C 0.67); the personal well-being questionnaire measured self-confidence in face of adversity and illness (alpha C 0.83), close personal relationships and meaning in life (alpha C 0.67), fear of dependence and physical degradation (alpha C 0.84), no time for family and meaningful activities (alpha C 0.71).

Death anxiety was assessed in this study by means of certain negative and positive factors in the questionnaires. The negative factors were: avoidance mechanisms, fear of dependence and physical degradation, and no time for family and meaningful activities. The positive factors were: self-confidence in the face of adversity and illness, close personal relationships, and meaning in life. Factors related to personal relationships and meaning in life were included because, as mentioned earlier, these existential factors can increase anxiety in dying patients if neglected earlier in life and they are also important issues affecting healthy people — and, subsequently, HCWs.

<sup>1</sup> Authorization was received from the Maslach Burnout Inventory (MBI) authors to translate questions from the MBI and to integrate them into the questionnaire; authorization was also received to translate and use the Barrett-Lennard Inventory and the PsychTest Aim Inc. questions.

Figure 1 / Comparison of Mean Scores (and Standard Deviation) Before Training and Four Months After (n=150)



### Statistical Analysis

All three questionnaires used continuous scores, from 1 to 6. The score for each factor was summed and divided by the number of items in the factor. The cut-off point was set at 3.6 (mean score of the 11 factors in the three questionnaires). Due to the high number of participants, parametric tests were used, although the distribution was not always normal. Pearson's correlations were used to assess relationships between factors. Paired-samples t-tests were used to compare the general summed scores of participants before and after the course, and independent-samples t-tests and one-way between-groups analysis of variance (ANOVA) were used to compare the scores before and after the course of different groups of HCWs (their differences determined based on two age groups, whether or not they worked in palliative care units, and their specific professions).

### RESULTS

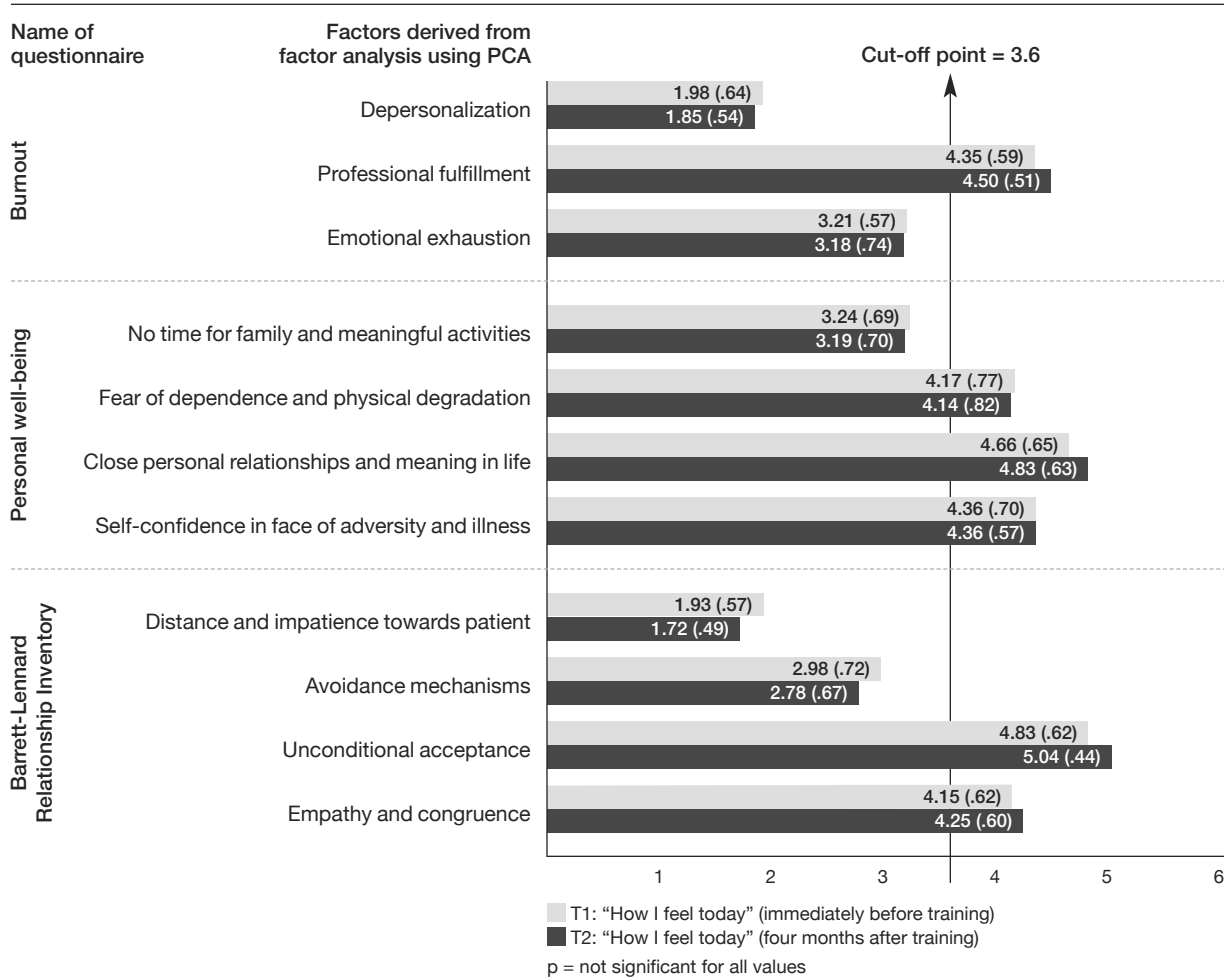
Comparison of T1 and T2 (n=150) showed significant improvements in the majority of factors (see

Figure 1). A separate comparison of T1 and T2 in the experimental group of HCWs working with dying patients outside of a palliative care unit (n=65) also revealed significant changes, but no significant changes were revealed in the control group (n=26) (see Figures 2 and 3). A comparison of the percentage of participants above and equal to the cut-off point showed relevant results before and after the course: emotional exhaustion decreased from 30.0 percent of participants to 20.7 percent, and fear of dependence and physical degradation decreased from 55.3 percent to 36.7 percent (see Table 1).

### Correlations of Burnout with Death Anxiety and Quality of Helping Relationship

In terms of positive factors, the results showed a significant and strong correlation between: professional fulfillment and self-confidence in the face of adversity and illness ( $r=.58$ ); and close personal relationships and meaning in life ( $r=.62$ ) (positive factors of death anxiety — that is, personal well-being). They also showed a significant and strong correlation between: professional fulfillment and

Figure 2 / HCWs Caring for Dying Patients Outside of Palliative Care Unit, Control Group Mean Scores and SD (n=26)



empathy and congruence (r=.67); and unconditional acceptance (r=.58) (positive factors of the helping relationship).

In terms of negative factors, the results showed significant moderate correlations between emotional exhaustion and fear of dependence and physical degradation (r=.35) (negative factor of death anxiety), between emotional exhaustion and no time for family and meaningful activities (r=.52) (negative factor of death anxiety), and between depersonalization and no time for family and meaningful activities (r=.49) There is also a significant and strong correlation between emotional exhaustion and avoidance mechanisms (r=.56) (negative factor of helping relationship), and depersonalization and avoidance mechanisms (r=.51).

All correlations were significant at level p<.05 or more (the majority were significant at level p<.001).

**Specific Comparisons**

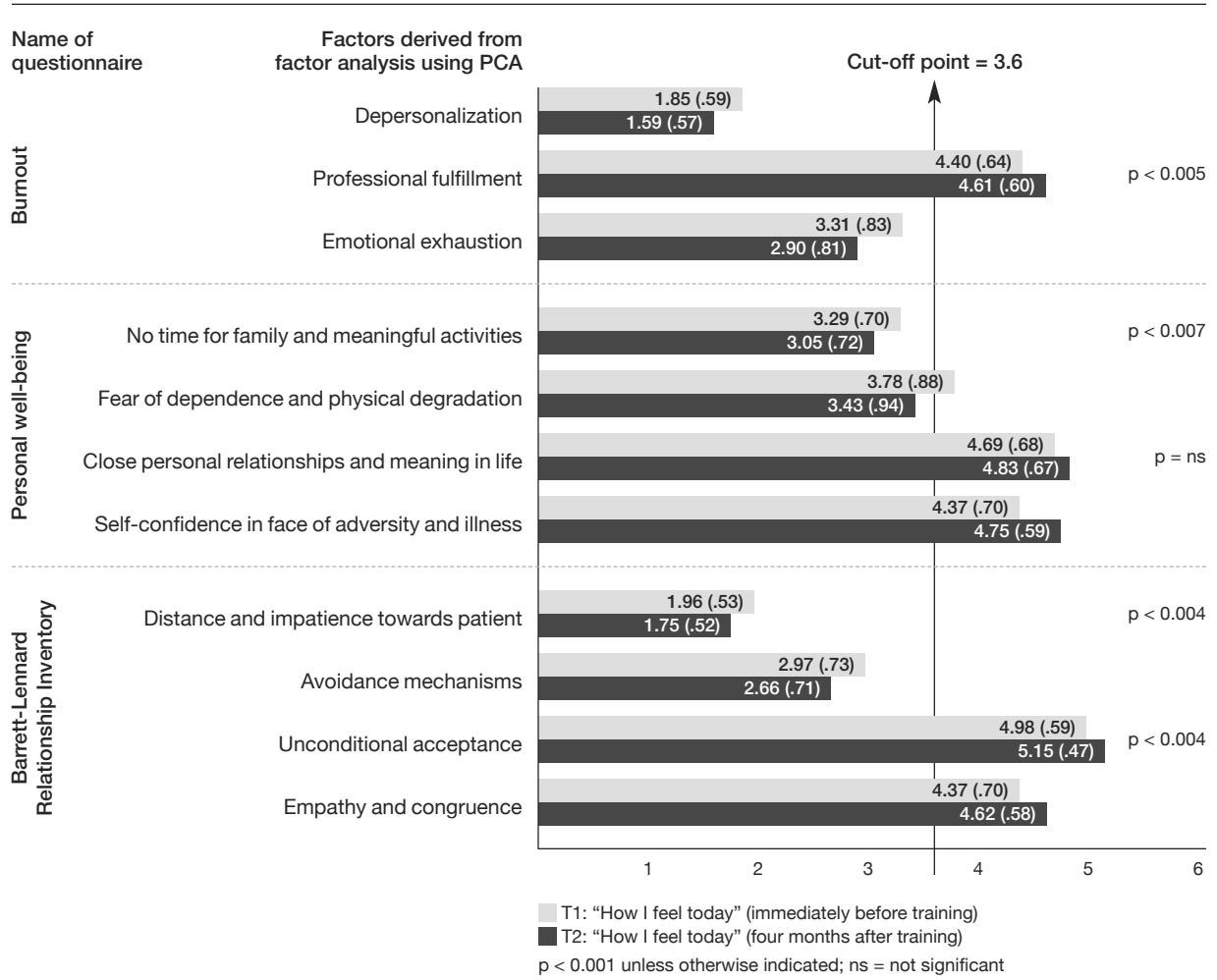
In relation to emotional exhaustion, there was a significant difference (p<.005) before the course

(T1) between HCWs working either in (M=2.94, SD=0.75) or outside (M=3.31, SD=0.83) of a palliative care unit. Although both groups were below the cut-off point, those working in non-palliative care settings suffered higher levels of emotional exhaustion. After the course, this difference was no longer significant (M=2.88, SD=0.81 and M=2.90, SD=0.81, respectively).

There was a significant difference in self-confidence in the face of adversity and illness before the course (p<.04) in HCWs over age 30 (who may have had more life experience and could thus maintain a sense of dignity and meaning in life, even when faced with the possibility of an incapacitating illness) (M=4.56, SD=0.66) as compared with those under age 30 (M=4.35, SD=0.62). After the course, this difference was no longer significant (M=4.77, SD=0.61 and M=4.68, SD=0.54, respectively).

The general results for fear of dependence and physical degradation (Table 1) were the highest among all of the negative factors: 55.3 percent of HCWs scored their distress above the cut-off point

**Figure 3 / HCWs Caring for Dying Patients Outside of Palliative Care Unit, Experimental Group Mean Scores and SD (n=65)**



**Table 1 / Percentage of Participants Above the Cut-Off Point Before and After Intervention**

Factor	Participants above cut-off point before training %	Participants above cut-off point after training %	Difference %
Depersonalization	1.3	0.7	0.6
Professional fulfillment	89.3	94.0	4.7
Emotional exhaustion	30.0	20.7	9.3
Fear of dependence and physical degradation	55.3	36.7	18.6
Self-confidence in the face of adversity and illness	86.7	95.3	8.6
Avoidance mechanisms	16.0	10.0	6.0
Empathy and congruence	83.3	90.0	6.7

at T1, and this was reduced to 36.7 percent at T2. Following the course, general levels (Figure 1) remained high, although the mean result was reduced to just below the cut-off point (M=3.80, SD=0.88 down to M=3.49, SD=0.88). Age and profession seem to play important roles here. Before the course, although HCWs under 30 had higher scores, there was no significant difference between the two groups (the under-30 group and the over-

30 group). After the course, there was evidence of a significant difference (p<.029): HCWs over 30 appeared less afraid of suffering and physical degradation (M=3.71, SD=0.95 down to M=3.34, SD=0.91) than those under 30 (M=3.88 down to M=3.65, SD=0.83). Before the course, doctors, psychologists, and others scored lower (M=3.49, SD=0.89) on the fear of dependence and physical degradation factor than nursing aides (M=4.17,

SD=0.67) ( $p<.006$ ), most of whom had received no training in palliative care before the course. After the course, this difference was no longer significant (nursing aides:  $M=3.64$ ,  $SD=0.91$ ; doctors, psychologists, and others:  $M=3.32$ ,  $SD=0.89$ ).

## DISCUSSION

The results appear to confirm the hypothesis that training that involves reflection on personal fears related to death and dying and that focuses on developing close personal relationships and living a meaningful life can lead to positive changes in HCWs' general levels of burnout and professional and personal well-being. Such training can have a positive effect on the quality of HCWs' relationships with patients and patients' families. These results were reinforced by a complete lack of significant results in the control group and significant results in the experimental group (see Figures 2 and 3).

There appears to be a clear relationship between a personal sense of well-being (self-confidence in the face of adversity and illness, and close personal relationships and meaning in life) and professional fulfillment, and between professional fulfillment and the capacity to feel congruent and to empathize with patients and their families and accept them unconditionally (empathy and congruence, and unconditional acceptance). It would also seem that the fear of dependence and physical degradation and not having time for family and meaningful activities increase the risk of burnout; and, overall, the use of avoidance mechanisms and burnout seem to be strongly correlated. This supports the hypothesis that education that only considers the development of a more positive helping relationship and professional fulfillment may not be sufficient. There is a need to also consider HCWs' personal well-being, as this plays an important role in their ability to avoid burnout and provide an effective helping relationship.

Previous studies support this view. One study has indicated that doctors' own fear of dying may compromise the palliative care their patients receive (3); Balfour Mount (as cited in the same study) has also maintained that people who provide health care may themselves be afraid of death, and this can undermine their ability to minister to the needs of terminally ill patients (3). Other studies have shown that because HCWs, in caring for the terminally ill, must cope with strong smells, sounds and facial expressions that communicate pain, and unsightly wounds, they may be reminded of their own mortality and become fearful (6, 20). These findings are supported by our study, in which over half of the participants

had positive scores on the fear of dependence and physical degradation factor; even after the training course, the mean score was still just below the cut-off point. It is also interesting to note that after the course, HCWs over 30 were more able to reduce this fear than those under 30 (a reduction from T1 to T2 of 7.5 percent compared to 4.6 percent). This may be because the older group had greater self-confidence in the face of adversity and illness and because their idea of what is physically tolerable may have changed with age and personal and professional experience of illness.

Bernard and Creux (4) discuss the use of defence mechanisms (described in this study as "avoidance mechanisms") to cope with the constant confrontation with suffering and death. They suggest that the continuous effort to relieve suffering when this may not always be achievable can lead to emotional exhaustion. Defence mechanisms adopted by HCWs — such as avoidance of the truth, trivialization, or derision — can have negative effects on the patients, who may not feel comfortable talking to HCWs about their troubles and thus become isolated in their world of illness (4, 8, 21, 22). HCWs may develop feelings of guilt at not having been available to patients who needed them and thus experience a reduced sense of professional fulfillment. The fact that levels of fear of dependence and physical degradation remained relatively high after the course also indicates that the course should focus more on HCWs' own prospect of dependence and physical degradation as well as on how they might cope with patients' suffering without resorting to defence mechanisms.

This study shows the importance of including HCWs' personal well-being in the burnout equation. The results indicate a strong correlation between emotional exhaustion and no time for family and meaningful activities; they suggest that emotional exhaustion at work can be exacerbated when HCWs feel they are not dedicating enough time to their families and to (non-work-related) activities that give meaning to their lives. Only this factor showed no significant change after the course in the general results. This may reflect the fact that looking at and making significant changes to one's personal relationships and lifestyle is important but may not be easily achieved in a six-day course, reinforcing the need for continuous emotional support for HCWs. However, a separate analysis of the results of HCWs caring for dying patients in and out of palliative care units shows that HCWs in palliative care units at T1 scored lower than HCWs out of palliative care units ( $M=3.14$  and  $M=3.29$ , respectively), but at T2 they scored higher ( $M=3.24$  and

M=3.05, respectively). A possible explanation for this is that HCWs trained in palliative care may have already made an effort to be closer to their loved ones and the training only heightened their awareness of the limitations imposed by long working hours and staff shortages, whereas HCWs with no palliative care training may have been making the effort for the first time, with significant results ( $p<.007$ ).

The results for burnout — in particular, emotional exhaustion and depersonalization — show that before the course, HCWs did not have high levels of burnout; depersonalization, in particular, scored very low (M=1.81 out of 6). However, improvements after the course were still significant. It is interesting to note that although neither group showed evidence of high levels of burnout, HCWs in and out of palliative care units did differ. HCWs working in other units with dying patients were significantly more emotionally exhausted than those working in palliative care units, and this difference disappeared after the course. Those working in palliative care units had received more training in communication, in teamwork, and in providing more quality of life to patients, and this may have made them feel more competent in their jobs, less helpless in the face of suffering, and less emotionally exhausted. The course seems to have helped the HCWs working in other units to develop some of the competencies and assurance that the trained palliative care workers had already acquired.

#### LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

In this study, there was an uneven distribution of participants — in particular, the majority was female, and they were nurses or nursing aides. However, this gender imbalance does reflect the reality in most health care institutions. For example, the latest statistical information on the nursing workforce in Portugal shows that 81 percent of nurses are female (23).

For reasons mentioned earlier, the control group was limited to 26 people, and of the study's 150 participants, only 65 were comparable to the control group (those caring for the dying outside of palliative care units). The initial sample consisted of 208 participants, but only 150 completed both sets of questionnaires, and these participants were not entirely randomized. It is therefore difficult to assess whether the sample is representative of the whole of Portugal. However, geographically, participants came from the south, centre, and north of Portugal.

The study used self-report instruments with no objective form of measurement, although ano-

nymity was guaranteed and the importance of truthful answers was stressed.

Further study of the effectiveness of emotional support could be undertaken by providing training and continuous support to a larger variety of institutions, and it could include an evaluation of the physical and objective signs of HCW burnout — such as physical symptoms, absenteeism, staff turnover, and team conflicts. HCWs who care for the dying in Portugal do not have an organized emotional support system within the institution and are basically left to fend for themselves. There is, therefore, a strong need for more investigation in this area in order to create positive change within Portugal's national health system. It would also be interesting to conduct similar training outside Portugal and compare the results.

#### CONCLUSION

This study shows that education in communication and in providing psychological and spiritual support to patients, along with personal introspection related to death anxiety, may help HCWs who care for the dying to reduce their need to protect themselves by avoiding meaningful helping relationships with patients. Such education may also help HCWs to reduce their level of work-related burnout. However, HCWs' personal sense of well-being also plays an important role in reducing burnout and in creating a good helping relationship with patients and patients' families, but the study results show that it is not possible to increase this sense of well-being sufficiently through a six-day course. HCWs who care for the dying and their patients would therefore benefit from a continuous support system for these HCWs.

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