

# Burnout in physicians and nurses: a multicentre quantitative study in palliative care units in Portugal

*Burnout* em médicos e enfermeiros: estudo quantitativo e multicêntrico em unidades de cuidados paliativos em Portugal

Desgaste profissional em médicos y enfermeros: un estudio cuantitativo y multicéntrico en unidades de cuidados paliativos en Portugal

Sandra Martins Pereira\*; Carla Margarida Teixeira\*\*; Orquídea Ribeiro\*\*\*;  
Pablo Hernández-Marrero\*\*\*\*; António M. Fonseca\*\*\*\*\*; Ana Sofia Carvalho\*\*\*\*\*

## Abstract

**Theoretical Framework:** Systematic contact with death is considered a risk factor for burnout in health, particularly for doctors and nurses who develop their professional activity in palliative care.

**Objectives:** To study the syndrome of burnout in these professionals in Portugal.

**Methodology:** A multicenter quantitative survey study.

**Results:** Out of 142 professionals, 88 returned the completed questionnaire; of these, only 3% were in burnout and 13% at high risk of developing this syndrome. Professing a religion ( $p=.005$ ) and having post-graduate education/training in palliative care ( $p=.011$ ) were significantly and inversely associated with burnout. Conflicts with other professionals ( $p=.012$ ) were significantly associated with developing this syndrome.

**Conclusion:** Although the percentage of professionals with high levels of burnout in palliative care is low, there are risk factors that can be optimized to promote a higher well-being state among professionals.

**Keywords:** burnout; palliative care; physicians; nurses; multicenter study.

## Resumo

**Enquadramento:** O contacto sistemático com a morte é considerado fator de risco de *burnout* na saúde, particularmente para os médicos e enfermeiros que desenvolvem a sua atividade profissional em cuidados paliativos.

**Objetivos:** Estudar a síndrome de *burnout* nestes profissionais, em Portugal.

**Metodologia:** Estudo multicêntrico, de cariz quantitativo com aplicação de um questionário.

**Resultados:** De um total de 142 profissionais, 88 devolveram o questionário devidamente preenchido; destes, somente 3% se encontravam em *burnout* e 13% em alto risco de desenvolver esta síndrome. Professar alguma religião ( $p=0,005$ ) e possuir formação pós-graduada em cuidados paliativos ( $p=0,011$ ) estavam significativa e inversamente associados ao *burnout*. A existência de conflitos com outros profissionais ( $p=0,012$ ) estava significativamente associada com o desenvolvimento desta síndrome.

**Conclusão:** Embora a percentagem de profissionais com altos níveis de *burnout* em cuidados paliativos seja baixa, há fatores de risco que podem ser otimizados de modo a promover um maior bem-estar dos próprios profissionais.

**Palavras-chave:** *burnout*; cuidados paliativos; médicos; enfermeiros; estudo multicêntrico.

## Resumen

**Marco Contextual:** El contacto sistemático con la muerte se considera un factor de riesgo de desgaste profesional (*burnout*) en la salud, especialmente, para los médicos y enfermeros que desarrollan su actividad profesional en los cuidados paliativos.

**Objetivos:** Estudiar el síndrome de desgaste profesional en estos profesionales en Portugal.

**Metodología:** Estudio multicéntrico, de naturaleza cuantitativa mediante un cuestionario.

**Resultados:** De un total de 142 profesionales, 88 devolvieron el cuestionario debidamente cumplimentado; de estos, solo el 3 % presentaba desgaste profesional y el 13 % tenía un riesgo elevado de desarrollar este síndrome. Como factores personales asociados positivamente con el desgaste profesional, se identificaron el hecho de que los profesionales no profesan ninguna religión ( $p = 0,005$ ), así como el hecho de que no tienen formación de posgrado en cuidados paliativos ( $p = 0,011$ ). Las experiencias en el lugar de trabajo con una correlación positiva con el desgaste profesional fueron algunos conflictos con otros profesionales ( $p = 0,012$ ).

**Conclusión:** A pesar de que el porcentaje de profesionales con niveles elevados de desgaste profesional en los cuidados paliativos es bajo, existen factores de riesgo que pueden ser optimizados con el fin de promover que los profesionales tengan mejor bienestar.

**Palabras clave:** burnout; cuidados paliativos; médicos; enfermeros; estudio multicéntrico.

\* RN, Degree in Education Sciences, Master and Ph.D. in Bioethics, FP7 EURO IMPACT Project – Marie Curie Experienced Researcher, Researcher of the Bioethics Research Department, Institute of Bioethics, Catholic University of Portugal, 4169-005, Porto, Portugal [martinspereira.sandra@gmail.com]. Address for correspondence: Rua da Vinha, 39, 4795-124, Vila das Aves, Portugal.

\*\* Physician, Specialist in Anaesthesia and Intensive Medicine, Ph.D. in Bioethics, Hospital Centre of Porto, Santo António Hospital, Department of Anaesthesia, Intensive Care and Emergency, Invited Auxiliary Professor, Institute of Biomedical Sciences Dr. Abel Salazar, University of Porto and Researcher of the Bioethics Research Department, Institute of Bioethics, Catholic University of Portugal, 4169-005, Porto, Portugal [carlatx@gmail.com].

\*\*\* Degree in Applied Mathematics, Research Assistant, University of Porto, Faculty of Medicine, Department of Biostatistics and Medical Informatics, 4200-450, Porto, Portugal [orib@med.up.pt]

\*\*\*\* RN, Ph.D. in Organization and Health Services Management, Profesor Ayudante Doctor, Departamento de Enfermería, Facultad de Ciencias de la Salud, Universidad de Las Palmas de Gran Canaria, Las Palmas de Gran Canaria, 35016, España [pbermarr@gmail.com].

\*\*\*\*\* Psychologist, Ph.D. in Biomedical Sciences, Associate Professor, Catholic University of Portugal, Faculty of Education and Psychology, 4169-005, Porto, Portugal [alfonseca@porto.ucp.pt].

\*\*\*\*\* Degree and Ph.D. in Biotechnology, Associate Professor, Catholic University of Portugal, Institute of Bioethics, 4169-005, Porto, Portugal [acarvalho@porto.ucp.pt].

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## Introduction

Palliative care consists of active and global care provided to people in intense suffering due to a severe, incurable and progressive disease, especially in more advanced stages such as the end-of-life phase. Although they can be provided in early stages of development of the disease, it is undeniable that palliative care has a major focus on the end of life stage, helping the person live the remaining days with the best possible quality of life and the least suffering and as intensely and completely as possible. One of the goals of palliative care is, therefore, that people may die with dignity and that those who are close to them can also be supported throughout the disease process and, after death, in their grief.

This type of care requires an interdisciplinary work, since a wide range of interventions, areas of knowledge, technical-scientific expertise, and relational, human and ethical skills are needed. Professionals face multiple and demanding challenges when providing palliative care. Thus interaction, sharing of information and knowledge, role clarification, and effective leadership should be promoted.

The systematic confrontation with human suffering, vulnerability and finitude, together with the need to make ethical decisions, make healthcare work environments particularly demanding and exhausting. Considering that professionals working in palliative care teams are constantly faced with these scenarios, this study aims to answer the following questions: Are physicians and nurses of Portuguese palliative care teams (at risk of) in burnout? And what are the factors associated with this syndrome? It is based on these assumptions and questions that we consider it relevant to study of burnout in physicians and nurses working in Portuguese palliative care teams, especially considering the growing challenges that the development of these teams and the work they perform have been facing. The aim of this study is to identify the levels of burnout of these professionals, and characterise the factors associated with this syndrome.

## Background

Burnout was first described by Freudenberger, in 1974, as a phenomenon characterised by a “(...) state

of fatigue or frustration brought about by devotion to a cause, way of life, or relationship that failed to produce the expected reward” (Delbrouck, 2006, p. 15). This situation entails a strong sense of loss of identity, in which individuals question themselves, feeling empty. Burnout derives from the combination of two words - *burn* and *out* -, which refers to a state in which the person feels *burned* to the point of exhaustion, representing the collapse after all energy available has been used or burned. Metaphorically speaking, it can be illustrated as a battery whose energy was consumed until nothing was left.

Burnout can also be defined in its multidimensionality: (i) Emotional Exhaustion (EE) - feeling of physical and psychological exhaustion, failure of the person to give more of him/herself, lack of energy, fatigue; (ii) Depersonalisation (DEP) - the establishment of a cold, distant, cynical relationship with patients and colleagues, negative and inappropriate attitudes, loss of idealism and irritability; (iii) (reduced) Personal and Professional Accomplishment (PPA) – manifested by a sense of incompetence, lack of confidence and productivity, inability to respond to requests and to manage work-related or personal situations or, contrarily, a sense of omnipotence, which may be accompanied by a gradual loss of trust from colleagues and superiors (Maslach & Leiter, 1997).

The risk factors for burnout in palliative care, more specifically for nurses working in this area, can be divided into three levels: intrapersonal, professional/organisational and social levels (Claix-Simons, 2006). The intrapersonal level mainly includes the ideals and the high self-demands of the ego, in which the professionals' ideas about themselves and their work are not aligned with the reality. The professional/organisational level includes work overload, communication difficulties, working pace, organisational complexity, isolation, professionals' depreciation, role ambiguity and conflicts, and psychological and emotional distress associated with repeated confrontation with extreme situations as dying and death. Finally, at the social level, factors such as the ideals of excellence and a fragile socio-economic context should be considered.

The professional practice in palliative care may trigger potentially stressful feelings and emotions to the extent that healthcare professionals are inevitably affected by the suffering of those to whom they provide care. The persistent contact with death is, according

to several authors (Barbosa, 2010; Claix-Simons, 2006; Delbrouck, 2006; Osswald, 2008; Teixeira, Silva, & Medeiros, 2010; Teixeira, Fonseca, Carvalho, & Martins, 2010; Müller, Pfister, Markett, & Jaspers, 2010), one of the risk factors for the development of burnout, particularly when the adopted coping mechanisms are ineffective.

Although this issue is present across many scientific articles, manuals and books, emphasising the relevance of its prevention, there is a lack of specific studies on the topic, especially in Portugal and in the specific context of palliative care. The few existing studies are mainly comparative ones, suggesting that the levels of burnout of palliative care professionals working in palliative are identical (García, Centeno, Sanz-Rubiales, & Del Valle, 2009) or even lower than in other healthcare areas (Asai et al., 2007). These results are consistent with those that we found in a systematic literature review on this topic (Pereira, Fonseca, & Carvalho, 2011).

## Research questions

The aims of this study are: (i) to characterise the burnout syndrome in physicians and nurses working in palliative care teams in Portugal; (ii) and to identify the factors associated with this syndrome in these professionals. Aligned with these objectives, this study aims to answer the following research questions: Are physicians and nurses working in palliative care teams in Portugal (at risk of) in burnout? What are the factors associated with this syndrome?

## Methodology

To answer the research questions and achieve the proposed objectives, a quantitative, descriptive and correlational study was conducted. Thus, not only did we aim to characterise and describe the levels

of burnout, but we also aimed to correlate these levels with the associated factors.

The palliative care teams mentioned on the website of the Portuguese Palliative Care Association, in October 2008, were invited to participate in the study. The teams were selected based on the assumption that they met the criteria for organisation and quality of palliative care teams, as defined by this association following international guidelines. Thus, out of a total of 15 teams, nine agreed to participate study.

The following instruments were used for data collection:

- Socio-demographic questionnaire, with variables such as gender, age, marital status, existence of minor children and number of children, religion, profession, professional category, academic qualifications, post-graduate education/training in palliative care, shift work, number of working hours per week, years of professional experience and years of professional practice in that palliative care service/team.

- Questionnaire on work-related experiences - based on Embriaco et al. (2007), this questionnaire included variables as the number of night shifts in the week before survey fulfilment, number of extra shifts, number of days off, number of patients who died, conflicts with the actors involved in the care process, and the need to make ethical decisions such as withholding or withdrawing treatments and communication of diagnosis and prognosis to the patient and/or family;

- *Maslach Burnout Inventory* (MBI) – a self-completion questionnaire consisting of a set of items that can be used to identify the levels of emotional exhaustion, depersonalisation and personal and professional accomplishment using a Likert scale.

The questionnaires on the socio-demographic characteristics and the workplace experiences, together with the MBI, were distributed to a total of 142 professionals, of whom 88 returned the questionnaires (adherence rate of 62%). The cut-off points of Benevides-Pereira (2008) were used to identify the levels of burnout (Table 1).

Table 1  
*Cut-off points in the dimensions of the Maslach Burnout Inventory (based on Benevides-Pereira, 2008)*

| Burnout dimensions and cut-off points |                      |                   |  |
|---------------------------------------|----------------------|-------------------|--|
| Burnout levels                        | Emotional Exhaustion | Depersonalisation | Personal and Professional Accomplishment |
| High                                  | ≥ 25                 | ≥ 10              | ≥ 40                                     |
| Average                               | 15 - 24              | 4 - 9             | 33 - 39                                  |
| Low                                   | ≤ 14                 | ≤ 3               | ≤ 32                                     |

A person is considered to be in burnout when exhibiting high levels of Emotional Exhaustion (EE) and Depersonalisation (DEP) combined with low levels of Personal and Professional Accomplishment (PPA). Intermediately, we will use the classification criteria of the *Group of Studies and Research on Stress and Burnout* (GEPEB cited by Ebisui, 2008): the person with a high level in one of the dimensions - EE or DEP - or low level in the dimension of PPA is at risk of burnout; the person presenting two of the three dimensions beyond the cut-off point is at high risk of burnout; the person with one of the three dimensions beyond the cut-off point is at average risk of burnout; the person showing average or low levels in the dimensions of EE and DEP, and average or high levels in the dimension of PPA has a low risk of burnout.

Institutional permission to conduct the study was requested via institutional boards (e.g., Administration Boards, Ethics Committees and Directors of the participant services and institutions). In addition, a covering letter presenting the study and its objectives, as well as a free and informed consent form were delivered together with the questionnaires.

The questionnaires were analysed using the *Statistical Package for Social Sciences* (SPSS®, version 17.0). In the descriptive analysis of the sample, summary statistics were applied as appropriate. Categorical variables were described by means of absolute (n) and relative (%) frequencies. Continuous variables were described using the median, the 25<sup>th</sup> percentile and the 75<sup>th</sup> percentile, since their distribution was asymmetric. The Chi-square Test of Independence was used to examine the association between categorical variables. When the expected frequency in any cell of the contingency table analysis of the association between two categorical variables was less than 5, the Fisher's exact test was used. The Kruskal-Wallis test was used to test hypotheses concerning continuous variables, since their distribution was asymmetric. A

significance level of 0.05 was used in all hypothesis testing. The percentages were rounded to the nearest unit. In order to identify risk factors associated with the existence of burnout, the Odds Ratios (OR) with Confidence Intervals (CI) at 95% by univariate logistic regression were determined. Since this study is integrated into a wider project – Project *Who cares for those who care* of the Bioethics Research Centre of the Catholic University of Portugal, financed by the Grünenthal® Foundation and the Merck, Sharpe and Dohme® Foundation -, the following variables were included in the analysis as they were identified as predictors of burnout in the study of Teixeira (2013): socio-demographic variables, such as gender and age, the existence of minor children, professional group, post-graduate education/training in the area; and variables linked to work-related experiences, such as the number of deaths, conflicts, and the need to make ethical decisions.

## Results

Among the 88 professionals whose questionnaires were included in the analysis, 88% were female, with a median age of 32 years, 42% were married, and 80% practiced a religion. In terms of professional group, 80% were nurses and 20% were physicians. Thirty-three percent had post-graduate education/training in palliative care. As for professional experience, the median number of years was 10. The median number of years of professional practice in the palliative care service/team was three.

### Characterisation of the burnout syndrome among the participants

Most (55%) participants in this study had a low risk of burnout, 30% an average risk, 13% a high risk

and, finally, only 3% were experiencing burnout. The dimension of EE, the median was 18 (11-25) (average level), the dimension of DEP had a median of 3 (1-7) (low level), and the dimension of PPA had a median of 38 (32-43) (average level). It was also observed that while the professionals who were experiencing burnout (including those who were at high risk of developing this syndrome) presented high levels of EE - 28 (26-32), the professionals who were not in burnout showed only average levels of

EE - 16 (10-21). Concerning the dimension of DEP, the professionals who were experiencing burnout showed high levels of DEP when compared to the professionals who were not in burnout and whose levels of DEP were low - 2 (1-5). Finally, the professionals who were in burnout had low levels of PPA - 30 (28-31), while those who were not in burnout showed high levels of PPA - 40 (35-42). These differences were statistically significant ( $p < 0.001$ ) (Table 2).

Table 2

*Characterisation of the levels of burnout in physicians and nurses working in palliative care teams in Portugal*

|  | Total<br>(n= 88) |         | Burnout <sup>(*)</sup> |         |                     |         | p       |
|--|------------------|---------|------------------------|---------|---------------------|---------|---------|
|  |                  |         | No<br>(n= 74; 84%)     |         | Yes<br>(n= 14; 16%) |         |         |
| Maslach Burnout Inventory, med (P25-P75)   |                  |         |                        |         |                     |         |         |
| - Emotional Exhaustion                     | 18               | (11-25) | 16                     | (10-21) | 28                  | (26-32) | <0.001§ |
| - Depersonalisation                        | 3                | (1-7)   | 2                      | (1-5)   | 10                  | (6-15)  | <0.001§ |
| - Personal and Professional Accomplishment | 38               | (32-43) | 40                     | (35-43) | 30                  | (28-31) | <0.001§ |
| Burnout                                    |                  |         |                        |         |                     |         |         |
| Low Risk                                   | 48               | (55)    | 48                     | (65)    | 0                   | (0)     | -       |
| Average Risk                               | 26               | (30)    | 26                     | (35)    | 0                   | (0)     |         |
| High Risk                                  | 11               | (13)    | 0                      | (0)     | 11                  | (79)    |         |
| In Burnout                                 | 3                | (3)     | 0                      | (0)     | 3                   | (21)    |         |

med-median; P-Percentile; \*Chi-square Test of Independence; \*\*Fisher's Exact Test; § Mann-Whitney's Test. <sup>(\*)</sup> All professionals who were in burnout, as well as those who had a high risk of developing this syndrome were considered as experiencing burnout (cf. cut-off points specified in Table 1).

As regards the socio-demographic risk factors, and considering the logistic regression analysis, it was found that the professionals who practiced a religion were less susceptible to burnout than those who practiced no religion ( $p=0.005$ ; OR=0.155, 0.044-0.548 95%CI). Professionals who had post-graduate education/training in palliative care were also less likely to develop this syndrome ( $p=0.011$ ; OR=0.101, 0.013-0.812 95%CI). Moreover, although the burnout syndrome was only identified in nurses, this result was not statistically significant

( $p=0.064$ ). Shift work does not seem to be associated with burnout syndrome among the professionals in this sample. Thus, although the number of professionals with burnout syndrome working in shifts is considerably higher (79%) than the number of professionals who do not exhibit burnout and also do shift work (62%), this difference was not statistically significant ( $p=0.362$ ). These and other results concerning the association between burnout and socio-demographic variables are shown in Table 3.

Table 3  
Association between burnout and the socio-demographic variables

|  | Burnout            |         |                     |         | p       | OR    | 95%CI  |        |
|--|--------------------|---------|---------------------|---------|---------|-------|--------|--------|
|  | No<br>(n= 74; 84%) |         | Yes<br>(n= 14; 16%) |         |         |       |        |        |
|  | n                  | (%)     | n                   | (%)     |         |       |        |        |
| Gender   |                    |         |                     |         |         |       |        |        |
| Female   | 62                 | (84)    | 10                  | (71)    | 0.274** | 1.000 | -      |        |
| Male   | 12                 | (16)    | 4                   | (29)    |         | 0.484 | 0.130; | 1.800  |
| Age (years), med (P25-P75)                                   | 34                 | (27-43) | 30                  | (26-32) | 0.128§  | 0.932 | 0.860; | 1.011  |
| Marital status   |                    |         |                     |         |         |       |        |        |
| Single   | 32                 | (43)    | 4                   | (29)    | 0.589*  | 1.000 | -      |        |
| Married  | 30                 | (41)    | 7                   | (50)    |         | 1.867 | 0.496; | 7.027  |
| Divorced/Widowed/Other                                       | 12                 | (16)    | 3                   | (21)    |         | 2.000 | 0.389; | 10.283 |
| Existence of minor children                                  |                    |         |                     |         |         |       |        |        |
| No   | 46                 | (62)    | 8                   | (57)    | 0.724*  | 1.000 | -      |        |
| Yes  | 28                 | (38)    | 6                   | (43)    |         | 1.232 | 0.387; | 3.923  |
| Practice any Religion  |                    |         |                     |         |         |       |        |        |
| No   | 9                  | (13)    | 7                   | (50)    | 0.005** | 1.000 | -      |        |
| Yes  | 58                 | (87)    | 7                   | (50)    |         | 0.155 | 0.044; | 0.548  |
| Profession   |                    |         |                     |         |         |       |        |        |
| Physician  | 18                 | (24)    | 0                   | (0)     | 0.064** | 1.000 | -      |        |
| Nurse  | 56                 | (76)    | 14                  | (100)   |         | -     | -      |        |
| Academic Qualifications                                      |                    |         |                     |         |         |       |        |        |
| Degree   | 63                 | (85)    | 13                  | (93)    | 0.682** | 1.000 | -      |        |
| Masters  | 11                 | (15)    | 1                   | (7)     |         | 0.441 | 0.052; | 3.716  |
| Ph.D.  | 0                  | (0)     | 0                   | (0)     |         |       |        |        |
| Post-graduate Education/Training in Palliative Care          |                    |         |                     |         |         |       |        |        |
| No   | 42                 | (57)    | 13                  | (93)    | 0.011*  | 1.000 | -      |        |
| Yes  | 32                 | (43)    | 1                   | (7)     |         | 0.101 | 0.013; | 0.812  |
| Shift work   |                    |         |                     |         |         |       |        |        |
| No   | 28                 | (38)    | 3                   | (21)    | 0.362** | 1.000 | -      |        |
| Yes  | 46                 | (62)    | 11                  | (79)    |         | 2.232 | 0.573; | 8.70   |
| No. of working hours/week                                    |                    |         |                     |         |         |       |        |        |
| 35 hours   | 16                 | (22)    | 2                   | (14)    | -       | 1.000 | -      |        |
| 40 hours   | 16                 | (22)    | 6                   | (43)    |         | 3.000 | 0.525; | 17.16  |
| 42 hours   | 13                 | (18)    | 1                   | (7)     |         | 0.615 | 0.050; | 7.569  |
| Another  | 28                 | (38)    | 5                   | (36)    |         | 1.429 | 0.248; | 8.230  |
| Years of professional experience, med (P25-P75)              | 11                 | (4-19)  | 9                   | (4-12)  | 0.187§  | 0.938 | 0.864; | 1.018  |
| Years of professional practice at the service, med (P25-P75) | 3                  | (2-8)   | 2                   | (1-6)   | 0.382§  | 0.913 | 0.776; | 1.076  |

med-median; P-Percentile; \*Chi-square Test of Independence; \*\*Fisher's Exact Test; § Mann-Whitney's Test.  
OR-Odds Ratio; 95% CI - Confidence Interval at 95%.

Considering the experiences in the workplace in the week before survey completion, only the existence of conflicts with other professionals seemed to increase the likelihood of developing burnout ( $p=0.012$ ;

OR=19.909, 18.98-20.882 95%CI. The other experiences, particularly the need to make ethical decisions were not associated with higher odds of this syndrome (Table 4).

Table 4

Association between burnout and experiences in the workplace in the week before survey fulfillment

|                              | Burnout  |      |          |       | <i>p</i> | OR     | 95% CI |        |
|------------------------------|----------|------|----------|-------|----------|--------|--------|--------|
|                              | No       |      | Yes      |       |          |        |        |        |
|                              | <i>n</i> | (%)  | <i>n</i> | (%)   |          |        |        |        |
| Number of night shifts       |          |      |          |       |          |        |        |        |
| 0                            | 40       | (54) | 5        | (36)  | 0.303*   |        |        |        |
| 1 to 2                       | 30       | (41) | 7        | (50)  |          | 1.867  | 0.539; | 6.460  |
| >=3                          | 4        | (5)  | 2        | (14)  |          | 4.000  | 0.578; | 27.705 |
| Number of extra shifts       |          |      |          |       |          |        |        |        |
| 0                            | 58       | (78) | 12       | (86)  | 0.485§   | 1.000  | -      |        |
| 1 to 2                       | 13       | (18) | 2        | (14)  |          | 0.744  | 0.148; | 3.732  |
| >=3                          | 3        | (4)  | 0        | (0)   |          | -      | -      |        |
| Number of days off           |          |      |          |       |          |        |        |        |
| 0                            | 27       | (36) | 3        | (21)  | 0.349§   | 1.000  | -      |        |
| 1 to 2                       | 32       | (43) | 7        | (50)  |          | 1.969  | 0.464; | 8.361  |
| >=3                          | 15       | (20) | 4        | (29)  |          | 2.400  | 0.473; | 12.183 |
| On vacation                  |          |      |          |       |          |        |        |        |
| No                           | 66       | (89) | 12       | (86)  | 0.657**  | 1.000  | -      |        |
| Yes                          | 8        | (11) | 2        | (14)  |          | 1.375  | 0.260; | 7.283  |
| Number of patients who died  |          |      |          |       | 0.936§   |        |        |        |
| 0                            | 38       | (51) | 7        | (50)  |          | 1.000  | -      |        |
| 1 to 2                       | 23       | (31) | 6        | (43)  |          | 1.416  | 0.424; | 4.735  |
| >=3                          | 13       | (18) | 1        | (7)   |          | 0.418  | 0.047; | 3.723  |
| Existence of conflicts with: |          |      |          |       |          |        |        |        |
| - Colleagues                 |          |      |          |       |          |        |        |        |
| No                           | 69       | (93) | 13       | (93)  | 1.000**  | 1.000  | -      |        |
| Yes                          | 5        | (7)  | 1        | (7)   |          | 1.062  | 0.114; | 9.846  |
| - Superiors                  |          |      |          |       |          |        |        |        |
| No                           | 68       | (92) | 14       | (100) | 0.584**  | 1.000  | -      |        |
| Yes                          | 6        | (8)  | 0        | (0)   |          |        |        |        |
| - Other professionals        |          |      |          |       |          |        |        |        |
| No                           | 73       | (99) | 11       | (79)  | 0.012**  | 1.000  | -      |        |
| Yes                          | 1        | (1)  | 3        | (21)  |          | 19.909 | 1.898; | 208.82 |
| - Patients                   |          |      |          |       |          |        |        |        |
| No                           | 71       | (96) | 12       | (86)  | 0.178**  | 1.000  | -      |        |
| Yes                          | 3        | (4)  | 2        | (14)  |          | 3.944  | 0.595; | 26.133 |
| - Patients' relatives        |          |      |          |       |          |        |        |        |
| No                           | 67       | (91) | 11       | (79)  | 0.194**  | 1.000  | -      |        |
| Yes                          | 7        | (9)  | 3        | (21)  |          | 2.610  | 0.585; | 11.644 |

med-median; P-Percentile; \*Chi-square Test of Independence; \*\*Fisher's Exact Test; § Mann-Whitney's Test. OR-Odds Ratio; 95% CI - Confidence Interval at 95%.

## Discussion

At the moment that this study was conducted and considering the results presented above, most of the physicians and nurses who worked at the palliative care units in Portugal showed a low risk of burnout (55%). These results are aligned with those found

in the literature, especially in studies comparing the levels of burnout in palliative care teams with those found in professionals working in other services (Asai et al., 2007; García et al., 2009; Pereira et al., 2011). Thus, a new issue rises up related to the protective factors that may exist in palliative care units and counterbalance the existing risk factors,

avoiding the development of this syndrome. In fact, there seems to be a paradox related to professional practice in palliative care, where professionals can have ambivalent feelings, alternating from sadness, anguish, suffering due to the patients' death to other feelings, such as gratification and personal enrichment because of the work performed and care provided. This may act as a protective factor against physical and emotional exhaustion. According to Pereira (2011), the most common feelings associated with the professional practice in palliative care are precisely those of happiness and well-being, gratification, reassurance, usefulness, satisfaction, and personal and professional accomplishment.

Also with regard to the characterization of the burnout syndrome among the physicians and nurses who participated in this study, the significant difference identified in the dimension of DEP needs to be highlighted. In fact, those professionals who were not in burnout showed lower levels of DEP than professionals who were in burnout, whose levels of DEP were high. These results are particularly disturbing, especially because, even though the percentage of professionals in burnout is low, high levels of DEP can compromise the quality of care. Depersonalised attitudes correspond to behaviours of avoidance, cynicism and coldness (Maslach & Leiter, 1997) both in the relationship established with patients/families and with other professionals. According to Teixeira (2013), DEP may lead to *unethical* attitudes and behaviours by the professionals. Considering that the ultimate aims of palliative care are to relieve the suffering, promote quality of life and, finally, help the patient to die with dignity, high levels of DEP can compromise these objectives, thus negatively interfering with the care process.

As regards the socio-demographic risk factors, only the fact that the professionals practiced some type of religion and had post-graduate education/training in palliative care showed statistically significant results. The exposure to these factors was associated with lower odds of outcome (burnout). In our opinion, both variables should be carefully analysed. First, the religious dimension, which, based on the results, seem to function as a protective factor against burnout. Religious beliefs may help professionals attributing meaning to their work, especially because professionals may: experience their profession as a vocation; believe that the work they perform serves

a greater purpose; believe in the existence of a life beyond death. Therefore, it is our perspective that the religious and spiritual dimensions of the professionals working in palliative care teams should be addressed in future studies relating it further to burnout or as subject to be studied *per se* in palliative care (Pereira et al., 2011). Second, the result related to post-graduate education/training in palliative care is not surprising, as it has already been described elsewhere (Pereira et al., 2011). Professionals with higher level of education/training in palliative care are expected to be more aware of the objectives and purpose of the work they perform, thus death is not seen as a defeat, but as an integral part of the work performed. The inclusion of specific contents related to palliative care in the undergraduate education/training of healthcare professionals, namely physicians, seems to be associated with lower levels of burnout, particularly in terms of EE (Mougalian et al., 2013). In the education/training area, it should also be noted that the curricula and contents of postgraduate courses in palliative care usually include the issue of burnout and/or the one of professionals' emotional management, as recommended by national and international palliative care associations.

Finally, in relation to the work-related experiences, the only burnout risk factor identified in this study was the existence of conflicts with other professionals. This may be related to different care objectives, which may generate tension between the professionals working in palliative care and those working in other healthcare teams. The literature on the topic also considers the existence of conflicts to be a risk factor for the development of this syndrome, especially in palliative care. The same happens in other contexts of care, such as intensive care units (Teixeira, Ribeiro, Fonseca, & Carvalho, 2013). The similarity of these findings concerning the existence of conflicts as a burnout risk factor in diverse settings is particularly relevant as it can be overcome through an effective communication, articulation and integration of care, both within the teams and with other healthcare teams. According to Bernardo, Rosado, and Salazar (2010, p. 777), it is common for palliative care teams to be confronted with various problems, such as: "(...) communication problems within the team; (...) lack of trust in the other team members; lack of common goals; lack of clarity in role definition (...)", all of which can have a cumulative and energy-



consuming effect, over time, contributing to the development of burnout. According to Van Schijndel and Burchardi (2007), the existence of conflicts in professional healthcare contexts is a virtually inevitable phenomenon. Conflict management can therefore play an important role in the prevention of burnout (Pereira, 2011).

### Limitations

Despite these results and the interpretation and discussion that they have raised, it should be noted that this study was not free from limitations. First, the small sample size limited the multivariate analysis. In addition, it should be noted that this small sample size was associated with a high degree of heterogeneity in its characteristics. Second, the fact that the MBI was only applied once may have hampered the establishment of associations with variables such as the number of patients under their care who died in the week before survey fulfilment. We consider that future studies should analyse this aspect.

### Conclusion

The main findings of this study show that, although physicians and nurses working in Portuguese palliative care units are exposed to burnout risk factors, this does not seem to translate into high levels of this syndrome. In fact, results indicate that most participants exhibited a low risk of burnout, and only 3% were in burnout. However, the percentage of professionals in high and average risks of burnout constitutes a major concern, since these professionals may develop this syndrome in the future, if preventive measures are not implemented.

In this study, the existence of conflicts with other professionals was identified as a major burnout risk factor. Thus, one of the suggestions that can be driven is to encourage communication and articulation between professionals working in palliative care and those working in other healthcare settings. In an era in which the development of palliative care is becoming increasingly urgent, strategies need to be developed to ensure its effective integration into the existing healthcare systems and services. This will only be possible through the promotion of an effective communication and articulation.

Despite the implications and suggestions emerging from this study, some questions remain open for further studies, namely: Are there any differences

in the levels of burnout between physicians and nurses according to the type of palliative care team – home care, hospital support and inpatient unit? Are there any organisational protective factors and do palliative care teams use active strategies to prevent burnout? And, if so, what are these strategies? Does the number of deaths affect the emotional well-being of professionals working in palliative care and, if yes, what is the number of deaths and their associated characteristics? Finally, and considering the legal framework of palliative care in Portugal and the implementation of a National Palliative Care Network, how should an effective networking and articulation between professionals working in palliative care teams and those working in the currently existing services be promoted?

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