# Is it useful to ask "Está deprimido?" ("Are you depressed?") to terminally-ill Portuguese patients? Results from outpatient research

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#### ABSTRACT

Objectives: Depression is a serious psychological problem in the palliative care setting. Brief screening tools for depression are lacking and need to be brief and acceptable. This study aimed to identify the properties of the single Portuguese question "Está deprimido?" ("Are you depressed?") to screen for depression.

Methods: Retrospective study from 100 patient's medical records identifying the answers on the single Portuguese question for depression "Está deprimido?" ("Are you depressed?") and the HADS depression sub-scale, using a score >11 on the latter as the gold standard for clinically significant depressive symptoms. Sensitivity, specificity, positive predictive and negative values were calculated.

Results: Response rate for the single Portuguese question for depression was 100%. Prevalence of depression symptoms (HADS-d > 11) was 43%. To the question "Está deprimido?" 60 patients responded "yes." Sixteen patients who replied "no" to the single question had clinically significant depressive symptoms based on the HADS depression sub-scale. The single tool had 65.2% sensitivity, 49.2% specificity and 50.0% and 64.4% of positive predictive and negative values, respectively.

Significance of results: In this first preliminary retrospective Portuguese study, the single question for depression has shown poor screening properties. Future research in larger and mixed patients samples of Portuguese terminally ill is necessary to find more accurate and robust properties of this brief tool.

**KEYWORDS:** Depression, Terminally ill Portuguese patients, Single Portuguese depression question

# INTRODUCTION

Depression is a serious psychological problem in palliative care, affecting nearly 15% of terminally ill patients (Hotopf et al., 2002). Clinicians often lack the knowledge and skills to identify psychological issues

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such as depression in this patient population (Block, 2000). In frail and fatigued patients, typical of those found in the palliative care setting, screening tools need to be brief and acceptable.

Research on brief screening tools for depression in palliative care has attracted wide interest. Mahoney et al. (1994), for example, showed that a single-item interview for depression was as accurate as the Geriatric Depression Scale in detecting depression in older adults in palliative care. Chochinov et al. (1997) found that the single question, "Are you depressed?" successfully screened for depression in 197 patients receiving palliative care for advanced cancer, with 100% sensitivity, specificity, negative and positive predictive value compared with a score of four or greater on the Structured Interview Assessment of Symptoms and Concerns (SISC). A United Kingdom study was unable to replicate perfect sensitivity and specificity for this single item screening approach, although methodological variation between the two studies may have accounted for these differences (Lloyd-Williams et al., 2003). Other authors (Bayés et al., 1997; Julião et al., 2013a) developed screening instruments based on time and life perception and its relation with depression, although such tools are still far from being clinically useful.

Despite all the research efforts, researchers continue to study the efficacy and characteristics of brief screening tools for depression in patients with advanced diseases.

This study was designed to examine a brief screening instrument for depression within 100 terminally-ill outpatients being cared for in palliative care at the Champalimaud Clinical Center (CCC) in Lisbon. Within these patients, we sought to compare the single Portuguese question for depression "Está deprimido?" ("Are you depressed?") and the HADS depression sub-scale (HADS-d), using a score ≥11 on the latter as the gold standard (Pais-Ribeiro et al., 2007) for clinically significant depressive symptoms.

### **METHODS**

All outpatients answered the single question as well as the HADS as part of a battery of psychometrics administered to each patient prior to every palliative medicine consultation at the CCC. HADS is a screening tool for depressive symptoms, although used as a gold-standard in this study. The data concerning patients was collected retrospectively from medical records, from March 2013 to April 2014. Each battery of psychometrics is anonymous, having a serial number attached to each patient medical record. Ethical approval was obtained from the CCC Ethics Committee. Statistical analysis was done using SPSS 20.0 (Lisboa, Portugal).

#### RESULTS

One hundred patient's records were obtained from 100 different individuals. Response rate for the single Portuguese question for depression was 100%. Prevalence of depression symptoms (HADS-d  $\geq$  11) was 43%. Summary demographic and illness data are presented in Table 1. Table 2 shows the screening performance of the single Portuguese question "Está Deprimido?" compared with the HADS-d  $\geq$  11 as the gold standard. Sensitivity, specificity, positive predictive and negative values were calculated (also in Table 2).

To the question "Está deprimido?" 60 patients responded "yes." Sixteen patients who replied "no" to the single question had clinically significant depressive symptoms based on the HADS-d.

#### DISCUSSION

Various attempts have been made to develop brief screening approaches for depression in the terminally ill (Chochinov et al., 1997) in different palliative care settings around the world, including European

**Table 1.** Summary characteristics of patients

|   | Outpatients, $n (\%)$<br>( $n = 100$ ) |  |
|---|--|--|
| Gender, mean (SD)                         |  |  |
| Male                                      | 46 (46.0)                              |  |
| Female                                    | 54 (54.0)                              |  |
| Age, years                                |  |  |
| mean (SD)                                 | 66.1 (12.9),                           |  |
|   | range = 36-95                          |  |
| $\leq$ 65                                 | 52 (52.0)                              |  |
| >65                                       | 48 (48.0)                              |  |
| Race/ethnicity                            |  |  |
| Caucasian                                 | 99 (99.0)                              |  |
| African                                   | 1 (1.0)                                |  |
| Diagnosis                                 |  |  |
| Cancer                                    | 84 (84.9)                              |  |
| Non-cancer                                | $15~(15.2)^{\ddagger}$                 |  |
| Time since diagnosis                      |  |  |
| <1 year                                   | 21 (21.0)                              |  |
| 1–2 years                                 | 23 (23.0)                              |  |
| $\geq 2$ years                            | 56 (56.0)                              |  |
| Psychiatric drugs, n (%)                  |  |  |
| Antidepressants                           | 17 (17.0)                              |  |
| Anxiolytics                               | 34 (34.0)                              |  |
| Neuroleptics                              | 18 (18.0)                              |  |
| Anticonvulsivants                         | 52 (52.0)                              |  |
| Palliative Performance Scale <sup>†</sup> |  |  |
| mean (SD)                                 | 72.4(9.3)                              |  |

<sup>\*</sup> Based on medical records or patients information.

<sup>†</sup> Palliative Performance Scale: 100% – healthy; 0% – death.

<sup>\*</sup> Missing data (1 patient).

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**Table 2.** Screening performance for depression symptoms of the single Portuguese question for depression "Está deprimido?" compared with HADS- $d \ge 11$ , in 100 terminally-ill outpatients

|                              | HADS-d ≥11      |                 |                |                |  |
|------------------------------|-----------------|-----------------|----------------|----------------|--|
|                              | Sensitivity (%) | Specificity (%) | PPV            | NPV            |  |
|                              | CI95%           | CI95%           | CI95%          | CI95%          |  |
| Está deprimido?* $(n = 100)$ | 65.2            | 49.2            | 50.0           | 64.4           |  |
|                              | (49.8 to 78.7)  | (35.9 to 62.5)  | (36.8 to 63.2) | (48.8 to 78.1) |  |

HADS-d, Hospital Anxiety & Depression Scale – depression sub-scale; NPV, negative predictive value; PPV, positive predictive value.

countries. This is the first preliminary retrospective Portuguese study of the single question for depression in terminally ill individuals, although it has shown poor screening properties. The present study, while performed in a small sample of patients cared for in a palliative care setting, provides new insight on a new potential screening tool for depression in Portuguese terminally ill. To date, such a brief tool has been lacking in daily Portuguese palliative care practice.

Our results are similar and consistent to those already published by other authors about the properties and clinical applicability of a single question for depression applied in other patients cohorts, after the seminal work of Chochinov et al. (1997). Our single item question didn't perform as well as the results presented by Chochinov et al. (1997). Perhaps this difference might be due to two main reasons: the first one, using a high severity threshold of four or greater on SISC (equivalent to "depressed most of the time") might have improved results; and finally, using a semi-structured interview like SISC, could have allowed patients to be asked about depression in a more reflexive way and a determination made on its severity could have yielded more favorable results. Some differences may also be rooted in the concept of what it means to be depressed in different countries and cultures. This suggests that cultural perceptions on depression may be required prior to widespread uptake of such instruments in screening for depressive symptoms in palliative care. Future research on this particular aspect will be undertaken in Portuguese terminally ill.

Some other issues require further consideration. First, the high prevalence of depression symptoms found in this patients cohort, higher than found in the literature and consisted with previously Portuguese published research (Julião et al., 2013b; 2014). We are aware that this high prevalence likely strengthened the screening properties of the single Portuguese question for depression.

Finally, the authors think this should be presented as a negative study demonstrating poor performance of the single Portuguese item depression screening. The single Portuguese question for depression achieved low sensitivity and specificity values, although relevant for clinical practice and research.

At this point with the available Portuguese data, we think our preliminary findings show that the single Portuguese question does not perform sufficiently well to be used as a screening tool alone, although it could help clinicians to carefully identify those patients having depression as well as to identify those individuals having no depressive symptoms. Therefore, future research in larger and mixed patients samples of Portuguese terminally ill is necessary to find more accurate properties of this brief tool in different cohorts. We think future multicentric research using similar cultural samples of patients is warranted.

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