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Nurses' perceptions of depression in patients with cancer

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ABSTRACT

Objective: Our study aimed at examining nurses' perceptions of depression in cancer patients and their role in its management.

Method: We employed questionnaire-based semi-directed interviews. Participants were asked to classify 22 symptoms (related and specific to depression in cancer patients, related but not specific, and unrelated) as "very important," "important," "less important," or "not important" for the diagnosis of depression in cancer patients at two different timepoints (baseline and after a video education program). They were also asked to complete a questionnaire exploring their perceptions about depression and of their role in its systematic screening. We recruited nurses caring for cancer patients from four different departments (palliative care unit, hematology, medical oncology, and thoracic oncology) at an academic medical center.

Results: We interviewed 18 nurses and found that they had a good general knowledge of depression in cancer patients, with the majority of them being able to distinguish specific and important symptoms from nonspecific symptoms. Some nurses considered depression as a second-line symptom, and most did not employ a screening tool in their daily practice. All considered that they had a role to play in the management of depression, even as they acknowledged lacking specific training for that task.

Significance of results: Our results suggest that limited resources—especially lack of training—affects nurses' ability to correctly manage depression in their cancer patients.

KEYWORDS: Depression, Cancer, Nurses

INTRODUCTION

Depression is a common disease in oncology, with an estimated prevalence of 15% (Hotopf et al., 2002; Mitchell et al., 2011). Early identification or diagnosis of depression in cancer patients is an issue of quality of care as its impact on quality of life is severe. Indeed, depression can aggravate such physical symptoms as pain and fatigue (Lloyd-Williams et al., 2004; Rhondali et al., 2012*b*). Nearly half of all depressed patients are reported as not being supported for their depression (Lees & Lloyd-Williams, 1999; Rhondali et al., 2012*b*), whereas the benefit of such a treatment (antidepressants associated with counseling) has been well established (Rayner et al., 2010; 2011*a*; 2011*b*; Hart et al., 2012; Fulcher et al., 2008; Newell et al., 2002; Strong et al., 2008). More recent studies have shown that it is an independent predictor of cancer mortality (Lloyd-Williams et al., 2009; Satin et al., 2009). The missed cases of

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cancer patients with depression also have significant economic ramifications (e.g., medical and drug consumption, increased length of hospital stay) (Sobocki et al., 2006).

This situation can probably be partially explained by the fact that some symptoms—such as fatigue, anorexia, or sleep disorders—can be related to the cancer, to depression, or even to cancer treatments (Lloyd-Williams et al., 2004). We previously proposed to distinguish specific and nonspecific depression symptoms in cancer patients (see Table 1), which was very close to work done by Endicott (Endicott, 1984; Rhondali et al., 2012*c*; Guan et al., 2013). Our goal was mainly to help nonspecialists in mental healthcare to improve their ability to identify depression in cancer patients. There is also the false idea that depression, in the context of cancer, should be considered normal, or at least as an expected issue, along with the confusion between sadness and depression (Rodin et al., 2007).

For cancer patients, an interview conducted by an experienced psychiatrist based on the DSM–IV–TR (Diagnostic and Statistical Manual–Revision 4) remains the "gold standard" for a diagnosis of depression (Power et al., 1993; Hotopf, 2002; Meyer et al., 2003). However, oncology teams that include a psychiatrist or a psycho-oncologist are rare, and it is thus essential for the initial assessment to be conducted by an oncologist or nurse (Stiefel et al., 2001). Several studies have explored the agreement between nurses' assessments of patients' psychological distress and/or depression and found that nurses did not identify a large majority of patients who were depressed (Little et al., 2005; Rhondali et al., 2012*a*).

The current recommended approach to assessing depression in cancer patients is to utilize a scale combined with a clinical assessment (Holland et al., 2007; Rayner et al., 2011*b*), as opposed to just an intuitive judgment. Despite our growing knowledge and the existing international guidelines that recommend systematic screening and active management of depression, implementation in daily clinical practice remains difficult (Jacobsen et al., 2010; Mitchell et al., 2008).

The aim of our present study was to explore cancer nurses' perceptions of depression in their patients, and to identify the role they believe that nurses should play in the management of this disease.

Table 1. *Symptom importance and specificity for depression diagnosis in cancer patients*

Important and Specific Symptoms	Important and Nonspecific Symptoms	Unimportant Nonspecific Symptoms
Suicidal ideation	Anorexia	Phobias
Sleep disorders	Irritability	Indecision
Loss of pleasure	Anxiety	Weight loss
Hopelessness	Tone of voice	Agitation
Personal history of depression	Fatigue	Delusions
Request for hastened death	Somatization	Crying
Effect on daily life	Feelings of guilt	
Sadness		
Psychomotor impairment		

METHODS

The local ethics committee and institutional review board of the Hospices Civils de Lyon approved our study.

Participants

We recruited nurses from four different departments caring for cancer patients at Centre Hospitalier de Lyon Sud: palliative care, hematology, medical oncology, and thoracic oncology. The inclusion criteria were that participants should be a nurse in current clinical practice and have responsibility for the care and management of cancer patients. All received information about the study and were invited to participate. We received a list of volunteers from the senior nurse. Written information about the study and its purpose was given to all participants, and a written informed consent was signed before enrollment.

Procedure

All participants were enrolled between February 22 and May 29, 2012. We documented the demographic characteristics of every nurse, including age, sex, specialty, and years in practice. The study was conducted in five steps:

- **Step 1**. The "card-rank test." Nurses were invited to rank 22 cards representing symptoms, some of which are usually associated with depression (e.g., suicidal ideation, sleep disorders, loss of pleasure), some related to depression but can also be related to cancer and/or its treatment (e.g., anorexia, anxiety, fatigue, feelings of guilt), and some unrelated to depression (e.g., phobias, agitation, delusions) (Froissart et al., 1985). This list of symptoms was established based on the current literature dealing with depression in palliative care (see Table 1) (Hotopf et al., 2002; Endicott, 1984; Chochinov, 1994; van der Lee et al., 2005; Breitbart et al.,

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2000; Emanuel et al., 2000; Akechi et al., 2000; Bailey et al., 2005; Rayner et al., 2011*a*; 2009). Participants were asked to rank each symptom by importance for the diagnosis of depression in cancer patients from "important" to "not important." They were asked to include at least 10 symptoms in each of category.

- **Step 2**. After the baseline test, we showed participants a six-minute video of a psychiatric consultation (more information on the video is provided below). This consultation was conducted with a patient volunteer at the comprehensive cancer center who was being evaluated for depressive symptoms. We employed the same video that was used in a previous study for our group showing a complete consultation between a psychiatrist from a comprehensive cancer center and a depressed patient. The video development process was described in a previous work (Rhondali et al., 2012*c*). The institutional ethics committee also approved the six-minute videotape and its use for our study.
- **Step 3**. Immediately after the video, we conducted semistructured interviews. These interviews were set in a private room, and questions were geared toward eliciting open-ended responses to acquire specific information about nurses' perceptions of depression in cancer patients and the role they thought they themselves should play. The specific questions used during the interviews are available on request from the authors. All interviews were audio recorded and then transcribed verbatim. The names and personal information of participants were removed from the transcripts, and participants were assigned a code number. All audio files were kept in a secure location. We conducted two preliminary interviews to test the quality of the questions we planned to use with study participants.
- **Step 4**. The card-rank test was repeated to see if there were any changes.
- **Step 5**. Finally, the nurses were asked to complete a five-item questionnaire about the acceptability and effectiveness of depression screening in cancer patients. This questionnaire is a self-constructed questionnaire that we previously used with oncologists (Rhondali et al., 2012*c*).

Data Analysis

We summarized nurses' demographic data using descriptive statistics. For analysis of the card-rank test, we employed conventional parametric methods (comparison tests), and we used univariate analyses to examine associations between nurses' characteristics and their responses. For analysis of the card-rank test, we merged the four subcategories into two main categories ("very important" and "important" into "important"; "less important" and "not important" into "not important"). We classified an answer as correct when the participants chose "important" for the related and specific symptoms and "not important" for the related and nonspecific symptoms and the nonrelated symptoms. A value of $p < 0.05$ was considered significant for all statistical tests. Statistical analyses were performed using SPSS software (version 17, SPSS Inc., Chicago).

We performed qualitative analysis of the interviews using a thematic analysis framed by the "grounded theory" approaches (Chesebro & Borisoff, 2007), the first step of which was open coding, consisting of multiple reviews of transcripts to identify and categorize data (Lindlof & Taylor, 2002). Two authors (WR and TL) performed this first step independently. The second step divided the interview into "units of meaning" to highlight, in a third step, the underlying meaning of what the participants wanted to express. Careful comparison of interviews identified common elements and differences among participants' responses. During this last step, all the elements were categorized into major themes. The first author (WR) performed the translations of the reported comments. To complete this qualitative analysis, we employed ALCESTE software (Analyse de Lexème Co-occurents dans les Enoncés Simples d'un Texte [analysis of lexeme cooccurrence in a text]), which provided another method of analysis to strengthen our findings. We decided to use it after the thematic analysis in order to not impact the first step with the statistical findings. The hypothesis developed in this program considered distribution of vocabulary in a corpus as a linguistic trace of a cognitive work of the reconstruction of a specific object (Reinert, 1983; Geka & Dargentas, 2010). ALCESTE software allows lexical distributional analysis in a short sequence of a corpus to produce "simple statements." The objective was to obtain a first classification of these statements based on cooccurrences of words in order to identify the main lexical classes. The classes obtained represented the ideas and dominant themes of the corpus. The coefficient of association of a statement to a class was calculated using a chi-square test.

Sample Size Determination

In qualitative research, sample size is determined when none of the analysts recognize new or unique themes. This is known as data saturation. In our study, data saturation occurred after 18 interviews.

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Presenting Results

Editing was minimal to preserve authenticity. We used ellipses (. . .) to indicate that part of the quote was truncated when irrelevant information was deleted. When it was necessary to clarify the context, we added information in square brackets [].

RESULTS

We included 18 nurses from four different departments caring for cancer patients—palliative care ($n = 5$, 28%), hematology ($n = 5$, 28%), medical oncology ($n = 4$, 22%), and thoracic oncology ($n = 4$, 22%)—with 12 women (67%) and a median age of 40 years (Table 2).

Card-Rank Test Results

Before the interview, more than 70% of participants correctly classified the related and specific symptoms, except for loss of pleasure (61%), requests for hastened death (61%) and psychomotor impairment (56%). For the related but nonspecific symptoms, more than 70% of participants correctly classified only one symptom: anxiety (72%) (Table 3).

Following the interview, more than 70% of participants correctly ranked the related and specific symptoms, with the exception of personal history of depression (51%), requests for hastened death (67%), and psychomotor impairment (33%). More than 70% correctly ranked the related but nonspecific symptoms of fatigue (78%). There were no significant changes when we compared nurses' answers before and after the interview.

For several symptoms, we found significant associations between the correctness of the rating and nurses' characteristics, with inexperienced nurses (i.e., those with fewer years in practice) being more likely to classify sleep disorders ($p = 0.004$) as less important and weight loss ($p = 0.017$) more important for a diagnosis of depression than experienced nurses.

Table 2. *Nurses' characteristics (n = 18)*

Characteristic	*n* (%)
Female	19 (56)
Age, median (Q1–Q3*)	40 (32–47)
Department	
Palliative care	5 (28)
Hematology	5 (28)
Medical oncology	4 (22)
Thoracic oncology	4 (22)
Years in practice, median (Q1–Q3*)	10 (7–23)

*Q1–Q3 = first through third quartiles.

Questionnaire Results

According to our final questionnaire (see Table 4), nurses caring for cancer patients endorsed systematic screening (89%) but also expressed the need for training regarding such screening (72%). They also believed themselves to have a role to play in this process (100%).

Qualitative Analysis

The average length of an interview was 20 minutes (standard deviation (SD) = 9 min). We identified four main themes: symptoms of depression, depression in the context of cancer, depression management by a mental health specialist, and depression management by nurses.

Depression and Its Symptoms

Nurses identified several common symptoms of depression—such as sadness, anhedonia, social withdrawal, hopelessness, sleep disorders, anxiety, and suicidal ideation—and also changes in their behavior:

> (N14) "It is true that the notion of (. . .) sadness, loss of desire, it talks to me pretty well."

> (N4) "It happens to have people who used to come and talk and then don't talk no more."

> (N14) "She [the patient] said that she had no desire to do much; she was less interested in social activities, had some suicidal ideations (. . .) well, to make it more like an accident than a suicide. (. . .) She was not sharp; she was not looking me in the eye."

Nurses reported that depression is difficult to identify because patients do not admit to feeling depressed, they do not want to show it, and rarely report it spontaneously. Nurses hypothesized that this is because of the negative perception of depression in our society and a patient's desire to protect their own family:

> (N1) "There are many [patients] who succeed in hiding it [depression] because they did not want to talk, they will use all their strategies to not show it: 'I feel that depression in (. . .) our society, it is not very well considered.' Finally, (. . .) there are some patients that (. . .) do not accept to say that they are depressed. (. . .) So they hide it. Because they don't want to show their family that they feel bad, because they do not want to hurt them."

Depression in the Context of Cancer

Several nurses reported that depression in this context should be considered as normal, and that all

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Table 3. *Rates of correct classification of symptoms related to depression and specific to cancer and symptoms related to depression but not specific to cancer at baseline and after the interview*

Related and Specific Symptoms	Correct Answer Answer at Baseline, *n* (%)	Correct Answer Answer After Interview, *n* (%)	*p* Value*
Suicidal ideation	15 (83)	17 (94)	0.603*
Sleep disorders	13 (72)	16 (89)	0.402*
Loss of pleasure	11 (61)	14 (78)	0.471*
Hopelessness	14 (78)	17 (94)	0.338*
Personal history of depression	13 (72)	11 (61)	0.480#
Request for hastened death	11 (61)	12 (67)	0.729#
Effect on daily life	16 (89)	15 (83)	1.000 *
Sadness	15 (83)	15 (83)	1.000 *
Psychomotor impairment	10 (56)	6 (33)	0.180#
Related and Nonspecific Symptoms	Correct Answer at Baseline, *n* (%)	Correct Answer After Interview, *n* (%)	*p* Value*
Anorexia	10 (56)	11 (61)	0.735#
Irritability	6 (33)	5 (28)	0.717#
Anxiety	13 (72)	12 (67)	0.717#
Tone of voice	7 (39)	4 (22)	0.471*
Fatigue	12 (67)	14 (78)	0.71*
Somatization	10 (56)	7 (39)	0.317#
Feelings of guilt	9 (50)	9 (50)	1.000#

*Fisher's exact test. #Chi-square test.

patients might be subject to depressive symptoms during the cancer journey. Some nurses clearly distinguished adjustment disorders in the context of cancer as an adaptive and normal process as distinct from persistent depressive disorders:

> (N1) "If you just tell him that he has a cancer, it is clear that he will react to this announcement. Then, we cannot say right now he is depressed. I mean, this is a reaction to me, which is normal. When you have a cancer diagnosis told to someone, I mean, this is the blow. (. . .) Sometimes it happens that I ask, 'How is your mood today?' And the patient answers me, 'How do you want me to feel today with what they just told me?'"

However, in several interviews we found confusion between sadness, or adjustment disorder, and depression, underlying that a cancer diagnosis is so distressing that depression is always in the air:

> (N2) "Well, I think it's so (. . .) it must be so hard to be sick like that (. . .) and I think it [depression] is not very far (. . .) Then either you fall down into depression, or, in all the cases it was touch and go. (. . .) I do not want to say that this is inevitable, but in any case for me, it is a close thing."

It was very rare that cancer patients expressed or complained of suicidal ideations, and, as for several other symptoms of depression, they reported that suicidal ideation was often hidden behind such somatic symptoms as fatigue and pain, and also psychological symptoms, like anxiety and guilt:

> (N7) "They hide their depression with fatigue that is easier to report and/or to complain of in the context of cancer where it is uncommon for patients to tell us, 'Yes, I have trouble sleeping,' 'Yes, I want to kill myself,' 'Yes, I cannot read a book or a newspaper anymore.'"

Table 4. *Responses to the questionnaire about screening acceptability and effectiveness (*N = 18)

Questions	Yes, *n* (%)	No, *n* (%)
Do you think that systematic screening is an appropriate method for managing depression in cancer patients?	16 (89%)	2 (11%)
Do you think that systematic screening is feasible?	13 (72%)	5 (28%)
I have enough resources (time) to systematically screen my patients for depression.	12 (67%)	6 (33%)
I have enough resources (training) to systematically screen my patients for depression.	5 (28%)	13 (72%)
Nurses should play a role in systematic screening for depression.	18 (100%)	0 (0%)

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(N9) "I think guilt is the symptom that is most characteristic [of depression]."

We found important variations between nurses from hematology and thoracic oncology regarding requests for hastened death, with more patients expressing this type of request in thoracic oncology:

(N11) "Personally, I have never experienced people who will say, 'I'll (. . .) I'll jump,' or 'I'll take some drugs [to die].' On the other hand, we had a lot of requests for hastened death. Yes, for active euthanasia (. . .) There are often some requests (. . .) well, patients who say, 'But push me some product so that it will be over.'"

Finally, several nurses identified that there were some specific times when there was an increased risk for cancer patients to develop depression, such as immediately after completion of specific treatments (because of less follow-up) or recurrence or diagnosis of metastasis:

(N6) "I've noticed that a lot of patients are depressed after, when the treatment [the chemotherapy] is finished. When we (. . .) when we tell them, 'Well, it goes well, you will simply be monitored,' and there they just collapse."

Depression Management by a Mental Health Specialist

Almost all the participants reported that communication with patients about referral to a psychologist/psychiatrist was a real challenge, explaining that in general patients were afraid of mental health specialists. The fear of being referred to a psychiatrist was reported as being greater than of being referred to a psychologist. However, nurses considered that it was part of their job to inform patients about the content of an encounter with a mental health specialist and the associated outcomes in order to facilitate access to care:

(N1) "It is not because you meet with a psychologist that you're crazy. I often explain this [to patients], because there is still the idea that psychologists are for psychos."

(N16) "I think it is important to distinguish between a psychologist and a psychiatrist for patients. Because psychiatrist (. . .) it means madness and (. . .) it's (. . .) I've already heard, 'Well no, wait, I do not need a psychiatrist.'"

Nurses also acknowledged that their decision to suggest that a patient be referred to a psychologist or psychiatrist would be based on their feelings or intuition:

(N16) "I propose it (. . .) well, according to what I feel, according to the discussion with the patient."

Depression Management by Nurses

Nurses reported that they played a pivotal role in mood assessment and depression screening; however, they also had only a limited amount of time to provide psychological support for patients:

(N2) "I think that nurses have a role to play, (. . .) especially nurses. We spend a lot of hours with [patients]. More than a physician who will perhaps see the patient during the daily visit and at what might be a good time (. . .) Nurses will see the patient during the entire day; they will notice if there is a change in their behavior."

(N11) "We have less and less time. (. . .) It cost me a lot to say to a patient who is crying, because he or her feels bad or sad, 'Look, I do not have time to discuss this with you this evening; we'll talk tomorrow about it.'"

Nurses also reported depression as a second-line symptom that they would look for after such physical symptoms as pain, nausea, and dyspnea. We found variations regarding the use of specific tools for depression screening and/or identification among the interviewed nurses, with very few of them reporting that they would use one in their daily practice ($n = 2$):

(N9) "It's very difficult to be in front of someone who has a serious illness and (. . .) here, to detect (. . .) in fact (. . .) sometimes we find ourselves a little helpless because (. . .) well (. . .) have something to ask them (. . .) ask questions and to say at the end, well, he is depressed or he is not."

Finally, nurses described two types of behavior regarding depression management in cancer patients—mothering a patient and stimulation—with several nurses reporting some conflict in the type of care provided to these patients.

Results of the ALCESTE Analysis

The scope of our analysis was on 73% of the full verbatim text (excluding interviewer questions) and revealed four classes of meaning (Table 5). Class 1 consisted of terms related to cancer-related symptoms of depression (*fatigue*, *suicide*, *hide*, *mood*, *loss*, *fall*, *withdraw into oneself*). This class also

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Table 5. *Specific words from the four classes identified in the corpus**

Class 1		Class 2		Class 3		Class 4	
Words	χ^2	Words	χ^2	Words	χ^2	Words	χ^2
Fatigue	81	Psychologist	172	Illness	135	Go	47
Express	62	Psychiatrist	80	Cancer	98	Leave	39
Show	43	Come	45	Announce-ment	72	Take	39
Suicide	43	Management	45	Depressed	64	Act	32
Idea	33	Offer	43	Diagnostic	56	Care	32
Hide	32	Team	37	Treatment	47	Go back	32
Mood	31	Call	34	Fight	42	Stay	29
Really	28	Need	33	Normal	42	Enter	28
Loss	27	Today	31	Chemo-therapy	36	Day	25
Sensation	27	Help	30	Recurrence	35	Place	25
Recover	26	Department	30	Difficult	34	Hour	22
Anxiety	21	Meet	29	Chronic	31	Room	22
Envy	20	First	26	Give back	29	Put down	21
Feeling	19	Discuss	24	Secondary	26	Time	20
Verbalize	19	Time	23	Usually	25	Come back	20
Hear	18	Outside	23	Exit	22	Way	17
People	17	Nurse	22	Cure	22	Touch	17
Fall	17	Mindful	22	Associated	22	Work	17
Describe	17	Explain	22	Scan	22	Under-stand	17
Accident	17	Ask	21	Effect	21	Life	16
Look for	17	Systematic	18	Loose	21	Hand	16
Symptom	16	Follow	17	History	21	Age	15
Speak	15	Physician	17	Serious	18	End	15
Withdraw into oneself	14	Assessment	15	Depend	17	Try	15
Momentum	13	Antide-pressant	15	Face	16	Give	14
Rare	13	Interview	14	Resource	16	Moment	14
Deep	13	Signal	13	Remission	13	Simple	14

*Only words with a χ^2 result >12 appear in this table.

contains several words describing the difficulties involved in identifying these symptoms (*express*, *show*, *hide*, *sensation*, *verbalize*, *look for*, *describe*, *speak*). Class 2 showed a significant presence of words related to the management of depression, including their own role as nurses (*offer*, *team*, *call*, *discuss*, *time*, *nurse*, *explain*, *systematic*, *physician*, *assessment*), as well as management by a mental healthcare specialist (*psychologist*, *psychiatrist*, *management*, *meet*, *outside*, *mindful*, *interview*, *antidepressant*). In this class, the words *offer*, *discuss*, and *explain* highlight the importance of nurses in patient referral to mental health specialists. Class 3 is related to the cancer itself (*cancer*, *diagnostic*, *treatment*, *fight*, *chemotherapy*, *recurrence*, *cure*, *remission*) and the potential impact of cancer on a patient's mood (*difficult*, *chronic*, *secondary*, *usually*, *associated*, *loose*, *history*, *depend*, *face*, *resource*). Class 4 consisted of specific vocabulary describing the general relationship between cancer patients and nurses (*go*, *leave*, *take care*, *go back*, *stay*, *touch*, *understand*, *try*, *give*). In this class, we can also find several words related to temporality (*day*, *hour*, *time*), highlighting the lack of time nurses have when caring for cancer patients with depression.

DISCUSSION

We found that nurses have good general knowledge about the symptoms of depression in cancer patients, and the vast majority of them are able to distinguish specific and important symptoms from nonspecific ones. However, nurses also acknowledged depression as a second-line symptom that they would look for after such physical symptoms as pain, nausea, and dyspnea management. We also found some confusion between sadness and depression in several interviews. Almost all participants reported that they did not employ a screening tool in their daily practice and supplied different reasons for this (e.g., barrier to natural discussion, might scare patients).

Another major finding was that all participants believed that they had a role to play in the management of depression, even if they also acknowledged that they lacked specific training to enhance their confidence in identifying the symptoms of depression. These results are consistent with that of

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previous work conducted in the United Kingdom (Lloyd-Williams & Payne, 2002; 2003), where nurses reported a lack of training and difficulties in persuading medical staff that patients required further assessment and/or antidepressants.

Our findings suggest that the educational video intervention did not improve nurses' perceptions of depression because there was no significant difference when we compared their answers before and after the interview. For the related and specific symptoms, this is probably because nurses' answers were already correct before the video.

Our findings are different from what we have previously reported regarding the perceptions of oncologists and palliative care physicians about the resources available for systematic screening (Rhondali et al., 2012*c*). We previously found that physicians considered that they lacked time (62%) and training (55%) to systematically screen patients for depression, whereas in this study we found that the main barrier for nurses to systematically screen patients for depression was training (72%). These results are consistent with the results of the qualitative analysis, with the vast majority of nurses reporting that they were uncomfortable with depressive symptoms as compared to physical symptoms, and especially regarding referrals. These difficulties might be corrected by specific training (Strong et al., 2008) about the availability of specific tools, and communication with patients about referral to mental healthcare services. This type of training could also help nurses understand when the team should decide whether to adopt a mothering or a stimulating approach. It is also important to reinforce collaboration between nurses and psychologists to prevent nurses from being involved in counseling tasks. Finally, our results suggest that nurses missed some resources (especially training) to be able to correctly manage depression in cancer patients.

Based on previous studies (e.g., Rhondali et al., 2012*c*; 2013), we would like to propose an algorithm defining the possible roles of all care partners, including patients' caregivers (Figure 1). This algorithm follows the National Comprehensive Cancer Network (NCCN) and European Association for Palliative Care (EAPC) guidelines (Holland et al.,

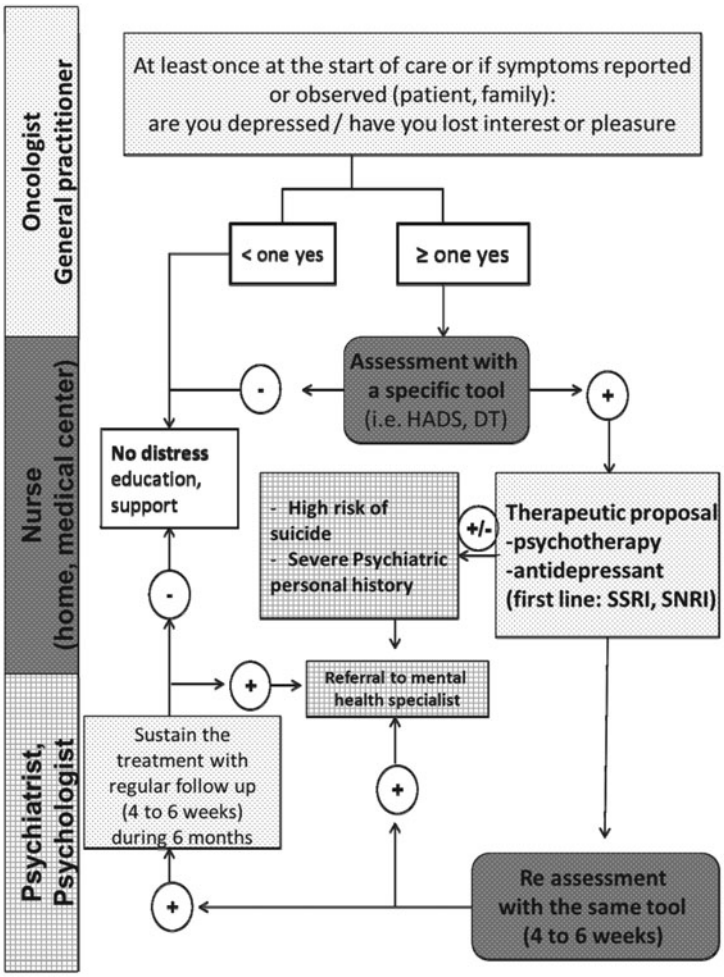

Fig. 1. Algorithm for management of depression according to profession of the healthcare provider. HADS, Hospital Anxiety Depression Scale; DT, Distress Thermometer; SSRI, selective serotonin reuptake inhibitor; SNRI, serotonin–norepinephrine reuptake inhibitor.

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2007; Rayner et al., 2011*a*) and aims to allow all care partners to be involved in depression management according to their skills and resources. Further research should test this type of strategy, using specific tools according to the clinical setting and population.

More research is necessary to confirm our findings and to better determine the best way to support nurses, as well as all care partners, for the purpose of depression management in cancer patients.

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REFERENCES

Akechi, T., Okamura, H., Kugaya, A., et al. (2000). Suicidal ideation in cancer patients with major depression. *Japanese Journal of Clinical Oncology*, *30*(5), 221–224.

Bailey, R.K., Geyen, D.J., Scott-Gurnell, K., et al. (2005). Understanding and treating depression among cancer patients. *International Journal of Gynecological Cancer*, *15*(2), 203–208.

Breitbart, W., Rosenfeld, B., Pessin, H., et al. (2000). Depression, hopelessness, and desire for hastened death in terminally ill patients with cancer. *The Journal of the American Medical Association*, *284*(22), 2907–2911.

Chesebro, J.W. & Borisoff, D.J. (2007). What makes qualitative research qualitative? *Qualitative Research Reports in Communication*, *8*, 3–14.

Chochinov, H.M., Wilson, K.G., Enns, M., et al. (1994). Prevalence of depression in the terminally ill: effects of diagnostic criteria and symptom threshold judgments. *The American Journal of Psychiatry*, *151*(4), 537–540.

Emanuel, E.J., Fairclough, D.L. & Emanuel, L.L. (2000). Attitudes and desires related to euthanasia and physician-assisted suicide among terminally ill patients and their caregivers. *The Journal of the American Medical Association*, *284*(19), 2460–2468.

Endicott, J. (1984). Measurement of depression in patients with cancer. *Cancer*, *53*(10 Suppl.), 2243–2249.

Froissart, G.D., Chauchat, J.H. & Terra, J.L. (1985). Etudes de la démarche diagnostique: Proposition méthodologique pour saisir et tester les différences d'attitude. *Union Médicale du Canada*, *114*(11), 884–892.

Fulcher, C.D., Badger, T., Gunter, A.K., et al. (2008). Putting evidence into practice: interventions for depression. *Clinical Journal of Oncology Nursing*, *12*(1), 131–140.

Geka, M. & Dargentas, M. (2010). L'apport du logiciel Alceste à l'analyse des représentations sociales: l'Exemple de deux études diachroniques. *Les Cahiers Internationaux de Psychologie Sociale*, *1*(85), 111–136.

Guan, N.C., Sulaiman, A.H., Zainal, N.Z., et al. (2013). Diagnostic criteria for major depressive disorder in cancer patients: A review. *The International Journal of Psychiatry in Medicine*, *45*(1), 73–82.

Hart, S.L., Hoyt, M.A., Diefenbach, M., et al. (2012). Meta-analysis of efficacy of interventions for elevated depressive symptoms in adults diagnosed with cancer. *Journal of the National Cancer Institute*, *104*(13), 990–1004.

Holland, J.C., Bultz, B.D. & National Comprehensive Cancer Network (2007). The NCCN guideline for distress management: A case for making distress the sixth vital sign. *Journal of the National Comprehensive Cancer Network*, *5*(1), 3–7.

Hotopf, M., Chidgev, J., Addington-Hall, J., et al. (2002). Depression in advanced disease: A systematic review, part 1. Prevalence and case finding. *Palliative Medicine*, *16*(2), 81–97.

Jacobsen, P.B., Shibata, D., Siegel, E.M., et al. (2010). Evaluating the quality of psychosocial care in outpatient medical oncology settings using performance indicators. *Psycho-Oncology*, *20*(11), 1221–1227.

Lees, N. & Lloyd-Williams, M. (1999). Assessing depression in palliative care patients using the visual analogue scale: A pilot study. *European Journal of Cancer Care*, *8*(4), 220–223.

Lindlof, T.R. & Taylor, B.C. (2002). *Qualitative communication research methods*. Thousand Oaks, CA: Sage.

Little, L., Dionne, B. & Eaton, J. (2005). Nursing assessment of depression among palliative care cancer patients. *Journal of Hospice and Palliative Nursing*, *7*(2), 98–105.

Lloyd-Williams, M. & Payne, S. (2002). Nurse specialist assessment and management of palliative care patients who are depressed: A study of perceptions and attitudes. *Journal of Palliative Care*, *18*(4), 270–274.

Lloyd-Williams, M. & Payne, S. (2003). A qualitative study of clinical nurse specialists' views on depression in palliative care patients. *Palliative Medicine*, *17*(4), 334–338.

Lloyd-Williams, M., Dennis, M. & Taylor, F. (2004). A prospective study to determine the association between physical symptoms and depression in patients with advanced cancer. *Palliative Medicine*, *18*(6), 558–563.

Lloyd-Williams, M., Shiels, C., Taylor, F., et al. (2009). Depression: An independent predictor of early death in patients with advanced cancer. *Journal of Affective Disorders*, *113*(1–2), 127–132.

Meyer, H.A., Sinnott, C. & Seed, P.T. (2003). Depressive symptoms in advanced cancer, part 1: Assessing depression: The Mood Evaluation Questionnaire. *Palliative Medicine*, *17*(7), 596–603.

Mitchell, A.J., Kaar, S., Coggan, C., et al. (2008). Acceptability of common screening methods used to detect distress and related mood disorders: Preferences of cancer specialists and non-specialists. *Psycho-Oncology*, *17*(3), 226–236.

Mitchell, A.J., Chan, M., Bhatti, H., et al. (2011). Prevalence of depression, anxiety, and adjustment disorder in oncological, haematological, and palliative-care settings: A metaanalysis of 94 interview-based studies. *The Lancet Oncology*, *12*(2), 160–174.

Newell, S.A., Sanson-Fisher, R.W. & Savolainen, N.J. (2002). Systematic review of psychological therapies for cancer patients: Overview and recommendations for future research. *Journal of the National Cancer Institute*, *94*(8), 558–584.

Power, D., Kelly, S., Gilsenan, J., et al. (1993). Suitable screening tests for cognitive impairment and depression in the terminally ill: A prospective prevalence study. *Palliative Medicine*, *7*(3), 213–218.

Rayner, L., Loge, J.H., Wasteson, E. & Higginson, I.J. (2009). The detection of depression in palliative care. *Current Opinion in Supportive and Palliative Care*, *3*(1), 55–60.

Rayner, L., Price, A., Evans, A., et al. (2010). Antidepressants for depression in physically ill people. *The Cochrane Database of Systematic Reviews*, (3), CD007503. doi: 10.1002/14651858.CD007503.pub2.

Rayner, L., Price, A., Hotopf, M., et al. (2011*a*). The development of evidence-based European guidelines on the management of depression in palliative cancer care. *European Journal of Cancer*, *47*(5), 702–712.

Rayner, L., Price, A., Hotopf, M., et al. (2011*b*). Expert opinion on detecting and treating depression in palliative care: A Delphi study. *BMC Palliative Care*, *10*, 10.

Reinert, M. (1983). Une méthode de classification descendante hiérarchique: Application à l'analyse lexicale par contexte. *Cahiers de l'Analyse des Données*, *8*(2), 187–198.

Rhondali, W., Hui, D., Kim, S.H., et al. (2012*a*). Association between patient-reported symptoms and nurses' clinical impressions in cancer patients admitted to an acute palliative care unit. *Journal of Palliative Medicine*, *15*(3), 301–307.

Rhondali, W., Perceau, E., Berthiller, J., et al. (2012*b*). Frequency of depression among oncology outpatients and association with other symptoms. *Supportive Care in Cancer*, *20*(11), 2795–2802.

Rhondali, W., Perceau, E., Saltel, P., et al. (2012*c*). Depression assessment by oncologists and palliative care physicians. *Palliative & Support Care*, *10*(4), 255–263.

Rhondali, W., Chirac, A., Laurent, A., et al. (2013). Family caregivers' perceptions of depression in patients with advanced cancer: A qualitative study. *Palliative & Supportive Care*, *13*, 1–8. Epub ahead of print.

Rodin, G., Lloyd, N., Katz, M., et al. (2007). The treatment of depression in cancer patients: A systematic review. *Supportive Care in Cancer*, *15*(2), 123–136.

Satin, J.R., Linden, W. & Phillips, M.J. (2009). Depression as a predictor of disease progression and mortality in cancer patients: A meta-analysis. *Cancer*, *115*(22), 5349–5361.

Sobocki, P., Jonsson, B., Angst, J., et al. (2006). Cost of depression in Europe. *The Journal of Mental Health Policy and Economics*, *9*(2), 87–98.

Stiefel, R., Die Trill, M., Berney, A., et al. (2001). Depression in palliative care: A pragmatic report from the Expert Working Group of the European Association for Palliative Care. *Supportive Care in Cancer*, *9*(7), 477–488.

Strong, V., Waters, R., Hibberd, C., et al. (2008). Management of depression for people with cancer (SMaRT oncology 1): A randomised trial. *Lancet*, *372*(9632), 40–48.

van der Lee, M.L., van der Bom, J.G., Swarte, N.B., et al. (2005). Euthanasia and depression: A prospective cohort study among terminally ill cancer patients. *Journal of Clinical Oncology*, *23*(27), 6607–6612.