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Depression in palliative care patients: a survey of assessment and treatment practices of Australian and New Zealand palliative care specialists

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Abstract

Objective. To explore the practices of members of the Australian and New Zealand Society of Palliative Medicine (ANZSPM) in assessing and treating depression in palliative care patients.

Methods. Semistructured questionnaires were forwarded to ANZSPM members in consecutive mail-outs to survey diagnostic and treatment practices for depression.

Results. The response rate was 62.3%. The median prevalence of depression, as perceived by respondents, in the present respondent patient populations was 20% (range 0%–90%); 57.1% of respondents always assessed for depression, whereas 42.9% assessed for depression sometimes. The majority (98.9%) of respondents relied on clinical interviews to assess depression; non-somatic symptoms of the Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV) criteria were more useful than somatic symptoms. The depression screening tools most frequently used were one- and two-item questions. Pharmacological and non-pharmacological methods were used to treat depression, with selective serotonin reuptake inhibitors the most frequently prescribed medications. Psycho-educational and supportive counselling were the most frequently used non-pharmacological interventions. Nominated measures to augment depression management included improving access to psychiatry, psychology and other allied health services, the development of a screening tool specific to palliative care patients and associated guidelines for depression management.

Conclusions. This is the first Australasian study to explore the practice of medical practitioners regarding depression in palliative patients. Incorporation of screening tool questions into palliative care assessment interviews may warrant future research.

What is known about the topic? Depression in palliative care patients has a negative impact on quality of life; however, little is known about how Australasian palliative care medical practitioners manage depression in this patient population. What does this paper add? To the researchers' knowledge, this is the first Australasian study that explores the practices of local palliative care specialists in the management of depression in palliative patients.

What are the implications for practitioners? Overall management of depression in palliative care populations by Australasian practitioners is similar to that of their European colleagues. Consensus is that for assessment of depression in palliative patients, non-somatic symptoms of DSM-IV criteria are more useful than somatic symptoms. Practitioners report the need for improved access to psychiatric, psychological and other support services, for a palliative care-specific depression screening tool and for depression management guidelines applicable to palliative care patients.

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Introduction

Depression in palliative care patients contributes significantly to the impairment of physical, psychological and social aspects of life, even after controlling for the effects of pain and illness severity. Patients with significant psychological distress have increased symptomatology, both psychological and physiological, ^{2,3} that can decrease the patient's ability to do the emotional work associated with dying, causing anguish and worry in family members and friends. Psychological distress reduces quality of life, and depressive disorders are associated with suicidal thoughts and requests for assisted suicide among palliative care patients. Depression in palliative care patients is prevalent, although it can be underdiagnosed and undertreated, ^{6,7} and there is little information describing the management practices of doctors in relation to depressed palliative care patients.

There are many reasons why palliative care clinicians could underdiagnose and undertreat depression in palliative patients. First, diagnosis can be difficult; the term 'depression' encompasses a spectrum of depressive phenomena from transient symptoms to persistent depressive disorders, and many symptoms associated with depression are also independently associated with organic disease and progressive terminal illnesses. Doctors, in general, admit to lacking confidence in eliciting psychiatric morbidity.8 They can assume that depression is an appropriate response to impending death or avoid exploring psychological distress due to work pressures or concerns about causing more distress for the patient. Further, patients themselves are often reluctant to disclose their feelings, possibly due to a persisting stigma of mental illness in society. In addition, there are no definitive criteria to diagnose depression in the terminally ill. Several diagnostic criteria for depression in the Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV), ¹⁰ such as somatic symptoms of weight loss, fatigue, insomnia and poor concentration, can be attributable to the underlying incurable disease.11

The most rigorous method of assessing depression is the structured clinical interview;¹² however, due to limited clinical resources and time, shorter methods of assessment have been

proposed. Numerous clinical screening tools have been formulated, adapted and validated in palliative care settings, with many using psychological, rather than physical, symptoms to identify depression. Some examples of these tools, referenced in the present study, are listed in Table 1.

A recent Delphi study, involving mostly European palliative care specialists, explored expert opinion on the management of depression in palliative care.²⁵ The study indicated discordance between the views of experts, particularly regarding the benefits of assessment tools. With respect to treatment, mirtazepine and citalopram were considered the best choices of antidepressants and cognitive behavioural therapy (CBT) the best choice of psychotherapy.

There are no comprehensive studies concerning the practices of Australian and New Zealand medical practitioners with regard to depression in palliative care patients.

Methods

Design

The aim of the present study was to explore the practices of members of Australian and New Zealand Society of Palliative Medicine (ANZSPM) with regard to depression in palliative care patients. It was based on a purpose-designed semistructured questionnaire. Ethics approval was gained from Metro South Health Service District Human Research Ethics Committee, Queensland Health.

Participants

Participants were medical practitioners who were financial members of ANZSPM in 2010. ANZSPM is a speciality medical society that facilitates professional development and support for its members and promotes the practice of palliative medicine.

Questionnaire

Initial questions focused on depression assessment, including the perceived prevalence of depression in the participant's current patient population, the frequency and preferred method(s) of assessment, the usefulness of screening tools and various

Table 1. Examples of common clinical screening tools for depression, validated in palliative care populations

Screening tool	Relevance to palliative care patients			
Hospital Anxiety and Depression Scale (HADS)	Originally developed for use in the physically ill and omitted somatic symptoms. Combining the Anxiety and Depression scales improves validity in palliative care populations. ¹³			
Edinburgh Postnatal Depression Scale (EPDS)Brief Edinburgh Depression Scale (BEDS)	Originally developed for the postnatal period and omits somatic symptoms. Both 10-item (EPDS) and 6-item (BEDS) scales have been validated in the palliative care population. 14,15			
One- or two-item questions (1. Are you depressed? 2. Can you still find pleasure in?)	Using the question 'Are you depressed?' was found to provide 100% sensitivity and specificity, ¹⁶ although further studies in other populations have not replicated this result. ^{17,18} Using one question is more useful in ruling out depression, but adding the second question 'Can you still find pleasure in?' improves the validity of the diagnosis. ¹⁹			
Beck Depression Inventory (BDI)	Designed initially for medically ill patients; the short 13-item scale has been validated in palliative care patients ¹⁶ and the standard 21-item scale validated in a Greek palliative care population. ²⁰			
Hamilton Depression Rating Scale	This 17-item scale was shown to have a high degree of validity in measuring depression in patients with terminal cancer. ²¹			
Four-item algorithm	Developed in Australia, it uses energy, anhedonia, depressed mood and psychomotor retardation to determine whether to screen, which patients to screen and which patients to follow-up. ²²			
Visual analogue scale (VAS)	This scale is acceptable for very ill patients and those with language and reading difficulties. It has been validated in several studies in palliative care. ^{16,23,24}			

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symptoms of depression and the DSM-IV criteria for diagnosing depression in palliative care patients. Subsequent questions addressed treatment issues, including the participant's confidence in assessing depression, referral patterns and preferred treatments. The questions above were structured around numeric rating scales from 0 to 10, five-point Likert scales and multichotomous closed-ended response choices.

Questions designed for qualitative analysis canvassed identification of difficulties that medical practitioners experience in managing depression in palliative care patients and what may assist them in their practice.

Recruitment

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Participants were identified through the ANZSPM database. Society staff posted questionnaires independent of the study team, ensuring participant confidentiality. An information sheet, the questionnaire and reply-paid envelope were sent to all on the ANZSPM mailing list. To optimise response rate, a follow-up mail-out was posted 10 weeks after the initial mail-out. No information about non-responders could be elicited from ANZSPM.

Analysis

Quantitative analysis involved descriptive statistics to summarise questionnaire answers and correlation to explore relationships between variables. Inferential statistical tests were conducted to explore possible gender differences in confidence and referral patterns, analysis of variance investigated age differences, and Chi-squared tests of association investigated country differences in types of medication prescribed. The 5% level of statistical significance was used throughout.

Qualitative analysis was based on thematic analysis and coding of individual comments. Initially, themes were explored collectively by three researchers (KP, LR, MC). Analysis continued until the investigators agreed that no new themes were emerging. After reaching this agreement, coding was continued by a single researcher (KP).

Results

Participants

One hundred and eighty-six questionnaires were returned; two were marked 'return-to-sender', six 'no longer in clinical practice' and three respondents chose not to participate. This left 175 questionnaires suitable for analysis, a response rate of 62.3%. Table 2 summarises respondent and questionnaire return characteristics.

Respondents were palliative care professionals with experience in palliative care practice ranging from 1 to 57 years (median 10 years). The majority (73.1%) held the position of palliative care consultant.

Assessing for depression

The estimated prevalence of depression in respondents' current palliative patient caseloads ranged from 0% to 90%, with a median of 20%; 57.1% of respondents always assessed for depression and 42.9% only assessed for depression sometimes. Respondents who sometimes assessed did so when it was clinically indicated, with reported circumstances including obvious

Table 2. Questionnaire returns and respondent demographics summary

Data show the number of respondents in each group, with percentages in

Data show the number of respondents in each group, with percentages in parentheses, where appropriate

	Australian	New Zealand	Total	
Returns Total ANZSPM members,	215	74	289	
November 2010				
No. questionnaires returned	141	45	186	
Questionnaires suitable for analysis-	133 (209)	42 (72)	175 (281)	
%	63.6	58.3	62.3	
Gender ^A				
Male	57 (32.6%)	21 (12.1%)	78 (44.7%)	
Female	76 (43.7%)	20 (11.5%)	96 (55.2%)	
Age (years)				
25–35	11 (6.4%)	0	11 (6.4%)	
36–45	31 (17.9%)	12 (6.9%)	43 (24.9%)	
46–55	39 (22.5%)	8 (4.6%)	47 (27.2%)	
56–65	37 (20.8%)	18 (10.4%)	55 (31.2%)	
>65	15 (19.7%)	4 (2.3%)	19 (11%)	

^AOne New Zealand participant did not indicate gender.

symptoms or issues disclosed in the clinical interview, concerns raised by staff or family, a previous history of depression or other risk factors. The patient's health status and prognosis also influenced respondents to assess only sometimes. For example, if the patient was very ill with only days to live, then the clinicians reported they were less likely to assess for depression.

The majority (98.9%) of respondents assessed for depression using the clinical interview, either alone (56.6%) or in conjunction with a screening tool (42.3%). A screening tool alone was used by 1.1% of respondents. The screening tools used most frequently were one- or two-item questions relating to depression and pleasure finding (53.1%) and Hospital Anxiety and Depression Scale (HADS; 11.4%). Other tools, listed in Table 1, were used infrequently. Of 99 participants who indicated they used only the clinical interview for assessment, 68 later indicated that they had used one of the screening tools listed. This point is expanded in the Discussion.

The symptoms considered the most useful for diagnosing depression are suicidal ideation, anhedonia, hopelessness and low mood (Fig. 1). Somatic symptoms are perceived as less useful. The differences in the perceived usefulness of these symptoms was also reflected in the perceived usefulness of the DSM-IV criteria overall, with only 45.7% of respondents finding them useful and 42.8% of respondents finding them not useful.

Responses to questions regarding management of patient depression were classified into two categories: (1) at least half the time (50% of the time or more); and (2) less than half the time. At least half the time, respondents: (1) express confidence in diagnosing depression (96%); (2) express confidence in treating depressed patients (91.4%); (3) refer to psychiatrists (26.6%); and (4) refer to psychologists (39.1%). Respondents who were more confident in diagnosing depression were more confident in treating depression (r=0.45, P<0.001) and less likely to refer for psychiatric assessment (r=0.33, P<0.001). Those less

likely to refer for psychiatric assessment were also less likely to refer for psychological assessment (r=0.20, P=0.008), and were more confident in treating depression (r=-0.35, P<0.001). Further analysis using independent t-tests showed that there were no significant gender differences in confidence or referral patterns.

With regard to age groups, analysis of variance revealed no significant differences in confidence in diagnosing or treating, or in referral patterns to psychiatrists; however, there were significant differences in patterns of referral for psychological assessment ($F_{(4,169)} = 2.51$, P = 0.04). Pairwise comparisons indicated that those in the oldest age group (>65 years) were significantly less likely than all other age groups to refer patients for psychological assessment for depression.

Treatment of depression

Ninety-seven per cent of respondents reported flexibility in treating depression in that they do not use one method exclusively

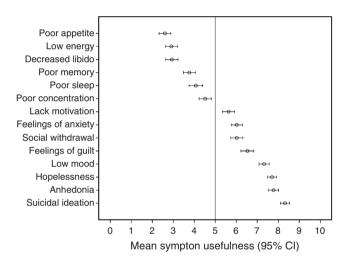


Fig. 1. Mean and 95% confidence intervals (CI) of the perceived usefulness of Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV) symptoms in diagnosing depression. Ratings ranged from 'not at all useful' (0) to 'extremely useful' (10).

(1.2% of respondents used pharmacological methods only, whereas 1.8% used non-pharmacological methods only). Respondents who did not treat all patients diagnosed with depression commented that initiation of treatment depends on the patient's clinical situation (e.g. short prognosis or too unwell) or the patient's choice.

Pharmacological treatments

For analysis of patterns of pharmacological treatments used, responses were collapsed into three categories: never, sometimes and often (at least half the time). Medications prescribed most often were selective serotonin reuptake inhibitors (SSRIs) and mirtazapine (Table 3). The preferred SSRIs were sertraline and citalopram. Comments revealed the clinicians would frequently choose medications with secondary benefits, such as prescribing a tricyclic antidepressant (TCA) if a patient had neuropathic pain or a benzodiazepine if the patient was anxious or agitated. Although not antidepressant agents, benzodiazepines were included because palliative care clinicians frequently use them to manage depressive symptoms, such as anxiety and insomnia.

Medication availability differs between Australia and New Zealand, so it was of interest to test whether the pattern of prescribing differs across countries. Table 3 shows the relevant patterns and results of the Chi-squared tests with significant differences identified in all therapeutic classes except antipsychotics and benzodiazepines. Respondents from New Zealand prescribe more SSRIs, TCAs and psychostimulants than their Australian counterparts. Australian respondents' use of medications is spread over the first four categories, which include more recently available antidepressants.

Non-pharmacological treatments

Participants who used non-pharmacological interventions were asked to rank the five methods most frequently recommended for their depressed patients. The three most recommended non-pharmacological methods were psychoeducational and supportive counselling, behavioural therapies and CBT. Other infrequently ranked interventions included

Table 3. Frequency of medication prescription for treatment of depression in palliative care patients χ² values and P-values refer refer to/ test for differences in/ the pattern of prescribing (never, sometimes, often) across Australia and NZ. SSRI, selective serotonin reuptake inhibitor; Venl, venlafaxine; Dulx, duloxetine; Mirt, mirtazapine; TCA, tricyclic antidepressant; Benz, benzodiazepine; AntP, antipsychotic; PsyS, psychostimulant

Medication	SSRI	Venl	Dulx	Mirt	TCA	Benz	AntP	PsyS
Australia ($n = 133$)								
Never	12.0%	36.1%	75.9%	13.5%	61.7%	72.9%	67.7%	72.2%
Sometimes	42.9%	55.6%	21.8%	39.1%	34.6%	21.1%	30.1%	26.3%
Often	45.1%	8.3%	2.3%	47.4%	3.8%	6.0%	2.3%	1.5%
New Zealand $(n=42)$								
Never	9.5%	66.7%	100%	83.3%	26.2%	66.7%	81.0%	35.7%
Sometimes	7.1%	28.6%	0%	11.9%	54.8%	31.0%	16.7%	52.4%
Often	83.3%	4.8%	0%	4.8%	19.0%	2.4%	2.4%	11.9%
Chi-squared (2 d.f.)	20.6	12.2	12.4	74.2	20.9	2.3	2.9	22.0
P-value	< 0.001	0.002	0.002	< 0.001	< 0.001	0.312	0.231	< 0.001

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problem solving, music, art, group and distraction therapies, aromatherapy and hypnosis.

Clinical themes

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Thematic analysis revealed two predominant clinical challenges in the management of depression: (1) the differential diagnosis of depression (i.e. determining whether a patient's symptoms are due to advanced disease, a mood disorder or normal sadness or grief); and (2) the treatment dilemma facing clinicians when trying to decide whether a depressed palliative care patient will be advantaged by the initiation of treatment given the individual's current fragility and likely prognosis.

Thematic analysis also identified issues that clinicians reported could assist in managing depression. The most common included: (1) a need to improve access to depression management services, such as psychiatric, psychological and other support services; (2) the need for a palliative care-specific depression screening tool; and (3) the need for management guidelines applicable to palliative care patients.

Discussion

To the researchers' knowledge, the present study is the first to explore the practices of Australian and New Zealand medical practitioners regarding the management of depression in palliative care patients. The study targeted the membership of ANZSPM and the 62% response rate is high for a postal survey. which likely reflects the concern of palliative care clinicians with this topic. Overall, ANZSPM members favour the use of a clinical interview and rely on non-somatic symptoms to formulate their diagnosis of depression. They are cognisant of the complex interaction between depression, which can manifest as somatic symptoms, and symptoms commonly experienced by palliative patients, such as fatigue and pain, which can be exacerbated by depression. They report confidence in diagnosing depression and have a low tendency to refer to psychiatrists and psychologists for assessment, although they are mindful of the difficulties in separating symptoms of depression from symptoms of advanced disease and normal grief or sadness. They treat depression with pharmacological and non-pharmacological interventions. These trends are independent of clinician gender and years of experience.

The ANZSPM members indicated that the median prevalence of depression in their current patient populations is 20%, which is in line with the results of a recent meta-analysis that reported that the international prevalence of depression or adjustment disorder in the palliative care population is 24.7%. ²⁶

In retrospect, an important consideration of the present study was the unqualified use of the term 'depression' in the questionnaire. As mentioned above, there is a spectrum of depressive phenomena ranging from transient symptoms to persistent depressive disorders: because the questionnaire only used the global term 'depression', respondents' replies were dependent upon subjective interpretations. This will influence findings regarding variations in perceived prevalence, assessment strategies and treatments, which, in turn, may impact the clinical implications of the findings. Given the importance of this topic to the Australasian health care setting, there is a clear need for definitive research.

Assessment

Approximately 50% of ANZSPM members use only a clinical interview to assess for depression, similar to the practice of senior palliative care physicians in the UK. ²⁷ However, it should be noted that in the present study two-thirds of those stating they use a clinical interview only also stated they use a screening tool, usually one- and two-item questions. A possible explanation is that respondents may not recognise the one- and two-item questions as validated screening tools, simply considering them an integral part of their clinical interview. This is supported by the observation that many clinicians requested a validated depression screening tool specific for palliative patients to improve their skills in diagnosing depression.

The preference for shorter assessment tools may reflect the need to optimise tool sensitivity with patient acceptability. A recent review of depression assessment instruments indicates that ultrashort and short tools are superior for palliative patients with the two-item depression question tool (ultrashort) exhibiting the best psychometric properties and the Edinburgh Postnatal Depression Scale (EPDS) and Brief Edinburgh Depression Scale (BEDS; short) also being acceptable. The two-item question tool enquires about the patient's mood and pleasure finding, which are the two major diagnostic criteria for Major Depressive Disorder (MDD) according to the DSM-IV. 10

The other DSM-IV supporting criteria for the diagnosis of MDD (i.e. appetite changes, sleep disturbance, low energy, psychomotor agitation or retardation, worthlessness or guilt, poor concentration and suicidal ideation) include several somatic symptoms prevalent in many advanced disease states. Therefore, it is not surprising that, overall, less than half the ANZSPM respondents found the DSM-IV criteria useful in diagnosing depression in their patients.

Nonetheless, clinicians rated individual non-somatic symptoms listed in the MDD diagnostic criteria as useful in their assessment of depression. The use of these non-somatic symptoms for the diagnosis of depression in palliative patients is recommended in the recently published European Guidelines for the Management of Depression in Palliative Cancer Care. The somatic symptoms in the DSM-IV criteria were rated least useful and, interestingly, a recent study has shown that if these symptoms (i.e. poor appetite, poor sleep, low energy) are not present in palliative patients, then there is a low risk of depression.

Treatment

Once a diagnosis of depression is made, ANZSPM clinicians, similar to those in the UK²⁷ and other countries, ³¹ prefer to treat with both pharmacological and non-pharmacological interventions.

SSRIs (sertraline and citalopram) and mirtazapine are the medications most commonly used by clinicians in Australia and New Zealand. This practice is supported by international research; a recent Cochrane review recommends the use of anti-depressants (SSRIs and TCAs) in the physically ill for the treatment of depression, with the largest effect noted 6–8 weeks after commencement of treatment. Further, a systematic review and meta-analysis of the use of antidepressants in palliative patients also supports antidepressant use for treating depression, but indicates there is insufficient evidence to recommend one

medication over another.³³ The European Guidelines for the Management of Depression in Palliative Cancer Care suggest the use of a common antidepressant (sertraline, citalopram or mirtazapine) as the preferred pharmacological treatment, with TCAs as second-line agents if the patient has neuropathic pain.²⁹

The use of medications differs significantly between Australia and New Zealand, with New Zealand practitioners prescribing SSRIs, TCAs and psychostimulants more often. This difference is possibly influenced by government restrictions. Although Australian doctors have easy access to SSRIs, mirtazapine, venlafaxine and duloxetine, ³⁴ those in New Zealand only have easy access to SSRIs; they are required to apply for special authority approval for mirtazapine and venlafaxine and have no access to duloxetine. ³⁵ In New Zealand, practitioners have greater reliance on older medications, such as TCAs, perhaps due to restricted choice compared with Australia. Restricted choice may also explain the tendency to use more psychostimulants in New Zealand than in Australia.

Psycho-educational and supportive counselling is the main non-pharmacological treatment recommended by ANZSPM members, followed by behavioural therapies and CBT. Members also reported that their tendency to recommend these, and other listed therapies, depends on availability. Several respondents indicated they would refer for more non-pharmacological therapies if they were accessible and affordable. Although there is some evidence showing a reduction in anxiety with some therapies. ^{36,37} there is limited evidence to recommend one non-pharmacological therapy over another in palliative care patients.³⁸ Despite this lack of evidence, the value of these services is well recognised in the palliative care fraternity;³⁹ consequently, it is not surprising that the dominant theme identified by respondents to improve depression management was improving access to psychiatry, psychology and other allied health services.

Little research has addressed the success of treatment of depression in palliative care patients. In one study, patients were followed up after 4 weeks of treatment and remission rates of 55% measured. The authors postulated this high remission rate may indicate that good palliative care itself, with psychological, spiritual, social and financial support, advocacy and the security of someone to call in a crisis, alleviates depressive symptoms. Such findings support the need to expand palliative care services to include easier access to non-pharmacological treatment modalities.

The formulation of both a screening tool and management guidelines specific for depression in palliative care patients were frequently suggested as initiatives that would improve the management of such patients. However, as described in the Introduction, numerous screening tools validated for palliative care patients are already available. Nonetheless, it would appear that utilisation is poor; this may be related to the time required to complete many tools, which limits suitability in palliative care patients. Because ANZSPM members preferentially use the clinical interview to assess for depression, it may be more appropriate to develop a series of questions that can be incorporated routinely into the interview rather than construct and validate another separate self-report tool. Because the one- and two-item questions are the favoured tools of ANZSPM members, with the latter recommended as the best ultrashort tool, ²⁸ the use

of these questions routinely in clinical interviews is likely to be more valuable for medical practitioners.

Overall, the recommendations published in the European Guidelines for the Management of Depression in Palliative Cancer Care²⁹ are remarkably similar to the current practices of ANZSPM members. Perhaps these guidelines could be tailored to Australia and New Zealand clinical environments and disseminated to clinicians for implementation into practice.

There are several limitations to the present descriptive study. First, although the questionnaire response rate was high, only ANZSPM members were approached, so the practices documented may not reflect those of the entire population of palliative care medical practitioners across Australia and New Zealand. Further, although the median estimated prevalence of depression in practitioners' palliative populations is in agreement with that occurring internationally, the large range of estimates (0%–90%) requires consideration. Individual estimates are influenced by factors such as the size of the patient population, practice setting and model of care, questions not addressed in the questionnaire. Although participants' qualifications were recorded, in many cases it was unable to be determined whether they possessed a physician or general practice training background. This information could have been used to analyse whether variations in training subsequently influence a clinician's management of depression.

Conclusion

The present study focused on the practices of ANZSPM members in the management of depression in palliative care patients. Overall, their management is similar to that of their European colleagues.

Competing interests

The authors declare there are no competing interests.

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