



# When symptoms of disease overlap with symptoms of depression

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## BACKGROUND

The diagnosis of depression is often dependent on somatic symptoms which overlap with the symptoms of many medical illnesses.

## METHOD

We analysed tape recorded interviews of 46 out of 61 eligible community dwelling older adults with advanced disease and many somatic symptoms of depression. Participants answered an open question about feelings, and structured questions about symptoms of depression.

## RESULTS

Twenty-four (39%) patients met DSM-IV symptom criteria for depression when somatic symptoms were included, and only 1 (2%) when they were excluded. Of the 24, 22 (92%) reported two or more psychological symptoms of depression and 14 of the 17 (82%) for whom transcripts were available disclosed feelings of psychological distress.

## DISCUSSION

Although every older adult with advanced disease reported somatic symptoms of depression, most did not meet DSM-IV criteria of depression even when all somatic symptoms are included. Including somatic symptoms accurately identifies patients who warrant follow up when psychological distress in unstructured interviews is used as the gold standard. There is no need to exclude somatic symptoms when considering a diagnosis of major depression in medical patients.

**Depression among the medically ill exacerbates the effects of their disease,<sup>1-3</sup> and reduces their quality of life,<sup>4,5</sup> adjustment,<sup>6</sup> and disability,<sup>7,8</sup> and is associated with increased suicide.<sup>7</sup> It adds to the burden of carers.<sup>9</sup> This increases health service utilisation and health care costs.<sup>3,10</sup>**

A DSM-IV diagnosis of depression requires that five symptoms, which may include both psychological and somatic symptoms, be present during the same period and that one of these is either depressed affect or anhedonia.<sup>11</sup> These somatic symptoms of depression may overlap with the symptoms of many medical illnesses. DSM-IV instructs doctors to exclude potential somatic symptoms of depression 'when they are clearly and fully accounted for by a general medical condition'.<sup>11</sup> But this advice creates practical problems.<sup>12</sup> It is often impossible to determine the aetiology of symptoms. Overinclusion of somatic symptoms of unknown aetiology may lead to overdiagnosis of depression.<sup>13-16</sup> Alternatives to DSM-IV and ICD-10 classifications of depression have been proposed to differentiate

depression from symptoms of a wide range of medical conditions including cancer,<sup>13</sup> Parkinson disease,<sup>17</sup> dementia,<sup>18</sup> chronic pain,<sup>19</sup> and general conditions for the elderly.<sup>16,20</sup> They include three approaches: 'aetiological' (case-by-case or blanket exclusion from diagnostic criteria of symptoms judged likely to be due to medical illness or aging), 'inclusive' (inclusion of all symptoms regardless of aetiology), and 'substitutive' (substitution of additional psychological symptoms for most or all somatic symptoms).<sup>13,16,21-23</sup>

Judging whether a symptom is 'clearly and fully accounted for' by the patient's medical condition may be impractical. We therefore decided to compare the two extreme approaches that do not require this judgment: inclusion of somatic symptoms regardless of aetiology (ie. the DSM-IV guideline is ignored) and exclusion of somatic symptoms which might be caused by the patient's medical condition or aging.

## Method

We recruited 61 (26 women, 35 men) community dwelling patients referred to a specialist palliative care service aged

over 50 years, fluent in English, and judged by their treating clinician to tolerate a 40 minute interview and to have a survival time greater than 2 weeks. Their mean age was 70 years (range 50–85 years). Diagnostic groups included: advanced cancer (47), neurological disease (6), advanced cardiovascular disease (1), respiratory failure (1), and uncertain diagnosis (6).

Many patients (131, 37%) were ineligible for the study; others could not be contacted (46, 13%); died before they could participate (43, 12%); or declined to participate (43, 12%). An additional 21 (6%) deteriorated after providing consent or scored <24 on the Mini-Mental State Examination (MMSE),<sup>24</sup> suggesting that the consent they provided may not have been informed.

Research assistants not part of the treating team collected data in patients' homes. Following an unstructured interview about moods and emotions, the DSM-IV symptom criteria for a major depressive episode were assessed using questions from the Psychogeriatric Assessment Scales-Depression<sup>25</sup> and the Canberra Interview for the Elderly.<sup>26</sup>

Technical problems and background noise rendered only 46 useable audio recordings of unstructured interviews out of 61. These were transcribed for qualitative content analysis using standard inductive techniques.<sup>27</sup> Coders were blind to the depression status of patients. They identified three specific themes associated with depression (depression, suicide and grief over loss of self) and noted use of uncommon expressions that also reflected psychological distress (eg. 'very grief stricken', 'mental anguish').

This project was approved by ethics committees of both Flinders University and the Repatriation General Hospital, South Australia.

## Results

Somatic symptoms of major depression were prevalent: loss of appetite or weight (47, 77%); lack of energy or fatigue (46, 75%); psychomotor agitation or retardation (41, 67%); and sleep changes (24, 39%). Yet only 24 (39%) patients met the DSM-IV symptom criteria for a major depressive episode using inclusive criteria, and only one (2%) met them when applying a

blanket exclusion of somatic symptoms.

Most of the patients who met DSM-IV criteria for major depression if all somatic symptoms of depression were considered, reported multiple psychological symptoms of depression: two or more psychological symptoms of depression (22, 92%); three or more (14, 59%); four or more (8, 33%); and all five (1, 4%). Sixteen unstructured interviews (35%) contained at least one of the 3 symptoms specific to depression or used uncommon expressions that indicated psychological distress.

The inclusive approach to somatic symptoms of depression showed a specificity of 93% (95%, CI: 86–100%) and sensitivity of 88% (95%, CI: 79–97%) in identifying patients whose unstructured interviews provided evidence of psychological distress. The exclusive approach showed a specificity of 100% (95%, CI: 97–100%) but a sensitivity of only 8% (95%, CI: 0–16%).

## Discussion

We found that most patients with advanced disease did not meet DSM-IV symptom criteria for depression even when their somatic symptoms were included. Including somatic symptoms to diagnose depression – regardless of their aetiology – rarely falsely identified patients who did not experience psychological distress. This suggests that the DSM-IV requirement (that five symptoms be present during the same period and that one of these be either depressed affect or anhedonia) reduces false positives to a minimum.

Suggestions that somatic symptoms be excluded or substituted when assessing older and medically ill adults<sup>16,28,29</sup> were not supported here; it would have led to failure to identify almost all patients who showed other evidence of psychological distress. Therefore somatic symptoms regardless of their aetiology did not adversely affect the identification of patients who showed evidence of psychological distress warranting follow up.

There were weaknesses in the study. The sample size was small, reflecting the difficulty in recruiting patients with advanced disease to research.<sup>30,31</sup> The ethical requirement for informed consent meant patients with

conspicuous cognitive impairments were excluded, so this important group were missing. The unstructured interviews identified patients with psychological distress warranting follow up but did not allow a differential diagnosis of depression.

## Implications for general practice

- DSM-IV diagnostic criteria for a major depressive episode include somatic symptoms common among medically ill patients.
- There is concern that including somatic symptoms may lead GPs to overdiagnose depression.
- Our results suggest that including somatic symptoms that might be attributable to disease or aging when assessing for depression nevertheless allows GPs to identify patients who warrant follow up for psychological distress.
- In contrast, excluding somatic symptoms that might be attributable to disease or aging when assessing for depression may lead GPs to under-recognise psychological distress.

Conflict of interest: none declared.

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# Poetry

## The Operation

*Becoming the person you have always been inside cannot be rushed. For some the dressing up in secret clothes at home – batiks and silks, caftans, sarongs – is all they ever need. For others, food comes next: vaguely Asian takeaway in confidential brown paper bags. Only the brave come out in public: sitting in shopfront restaurants proudly becoming what they eat, stir-fry and rice, and more rice, in small civilised portions. Wherever, you must use only chopsticks, or the washed right hand alone, and rise always from the floor still hungry, feeling smaller already, and daintier, and more refined. Soon the hormone shots will darken the skin. Submit to these procedures first: the chest-waxing, the lid-narrowing. And the nose-job, of course: you are leaving Big-Nose Europe behind. There can be no turning back; you are ready now for The Operation. A foot of flesh, at least, must go: the whole high pulpit of European condescension. Of course not everything is height: you must learn again to look up, not down. Courses should be taken in History and Language, in Chief Exports and Rainfall and especially Climate: stirred by the wings of strange, bright butterflies the monsoons are moving closer; already the summers feel wetter, the winters hotter. There is pain, of course, but there is also peace: a happiness oddly free of itself, free of shag-haired Europe and its doggy emotions. Dogs are for eating now, with the careful, inscrutable manners of a cat. Suddenly the bandages are off, and everything can be seen. The world has gone as quiet as a Public Library. Meditate for a time in the open sun, safe from zinc and freckles, the last ice melting from your heart, the brooding indoor races of the north at last forgotten.*

Peter Goldsworthy

Like a careful surgeon, the poet opens layers of suggestion that require our study. Our patient transforms into a body politic evolving through an identity crisis. Closing up, the stitches are neat but no-one is saying cure: only that from deeper experience comes insight, a certain clarity, and even joy.

Tim Metcalf

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